Imaging Antarctica:
Responses from Contemporary Artists.

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Contents

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Abstract

A great success in art practice is not to become what we look at, but rather, how we see.
- Rebecca Solnit[1]

Antarctica has been represented by countless different agents for a multitude of reasons, even before its official discovery in the eighteenth century. Whether in attempts to understand and locate an imagined southern continent, support and retell Heroic era expeditions, encapsulate twentieth-century geopolitics or twenty-first-century scientific research and climate change action, Antarctica has become a site upon which a huge range of themes can be explored. Not only has media such as artworks, maps, and literature been employed since the 1500s to proliferate specific narratives about Antarctica, but these representations have been, and continue to be the predominant way in which many people come into contact with this place. The sheer extremity and isolation of Antarctica means that physically visiting is extremely rare, and therefore, the images that are presented to the world become the most common mode of encountering the place. Focusing on works by artists Anna McKee, Chris Drury, Xavier Cortada, Gabby O'Connor, Adele Jackson, Anne Noble, Alexis Rockman, Joyce Campbell, Connie Samaras, Ronnie van Hout and Pierre Huyghe, this thesis examines some of the ways in which these contemporary artists have responded to scientific, tourism-related and science-fiction imaginings of Antarctica. In turn these artists, amongst others, work to interrogate modes of Antarctic representation and the wider implications that these images can have.

[1] Rebecca Solnit, 'Every Corner is Alive, Eliot Porter as an Environmentalist and Artist', Alan C. Braddock and Christoph Irmscher, *A Keener Perception: Ecocritical Studies in American Art History,* Alabama: University of Alabama Press, 2009, p. 214.

List of Figures

Introduction

Tim Higham described Antarctica as a "geography for our imagination: last wilderness, world park, global barometer, heroic graveyard".[1] As Higham suggests, Antarctica is a place that plays a variety of roles in popular imaginings, its identity often morphing to fit the various contexts within which it might be represented. Antarctica thus becomes a canvas upon which artists, scientists, politicians and others can project their own narratives. It is framed in such a multitude of ways that the place itself necessarily becomes a multitude of things. Indeed, as Elizabeth Leane has written of Antarctica's cultural construction, representations "do not simply describe a particular place but rather actively contribute to that place's coming into being".[2] Commentators such as Leane and Higham underscore the ways that the depiction of a place can be so far removed from most people's day-to-day experiences, that it begins to shape the perceived reality of the place: indeed, images of Antarctica create an imagined Antarctica. This thesis explores some of the ways that contemporary artists are engaging with and responding to a global economy of Antarctic representation; exploring some of these channels and modes of representation, and the implications of such. Each of the artists included here has chosen to participate in a wider conversation about how the world views and responds to Antarctica; what its place is in this era of anthropogenic climate change, and the role of artists to provoke critical thought and engagement in their viewers. The artists discussed in this thesis employ the specific framework of Antarctic representation; they explore themes such as isolation, uncertainty and fragility in order to engage with anxieties that are based in issues of environmental, social and political uncertainties.

Some of the specific impacts of artistic engagement with Antarctic subject matter have been explored by Gina Irish. Her article 'Southbound' discusses the value of alternative points of view presented by contemporary arts in contributing to wider representations. Irish explains that arts schemes, such as the Antarctica New Zealand residencies, have

[1] Tim Higham, 'Sense of Place', *Wilderness,* July 1977, p. 47.
[2] Elizabeth Leane, 'Fictionalizing Antarctica', Klaus Dodds, Alan D. Hemmings, and Peder Roberts, *Handbook on the Politics of Antarctica,* Cheltenham: Edward Elgar Publishing, 2017, p. 29.

> connected with unassuming audiences, shifting Antarctica beyond the traditional realm of exploration and science. These shared experiences connect the general public with a landscape that remains geographically distant, yet visually and psychologically close.[3]

Irish's examination of the New Zealand Artists to Antarctica programme is extremely positive; the author has outlined the ways in which artistic interpretation can translate Antarctic subject matter from something strictly exploratory and scientific into something relatable. While it is extremely difficult to measure the value of these translations, and similarly problematic to attempt to measure engagement and inspiration, the intentions of some artistic practices to contribute to this process of communication are – at their core – valuable. Many of the artists discussed here have accessed Antarctica through a residency pathway that, due to the generally inaccessible nature of the continent, offers some of the more comprehensive experiences available. Hence, it is important at the outset of this thesis to consider the ways in which institutional residencies, and indeed the limitations of access more broadly, might mediate artistic engagements with Antarctic themes.

Images of Antarctica have always shifted in response to knowledge of the place, and vice versa: global political and cultural discourses have altered the imagery and narratives produced of the continent. For instance, the inclusion of an 'anti-Arctic' continent on a 1587 map of the world by Rumold Mercator suggested that a mysterious and unknown continent did exist, even if there was no solid proof at the time. Later, with developing exploration and travel in the region, voyage painters and later photographers were able to capture a sense of the adventure and danger projected onto Antarctica. In bringing images 'home' from these expeditions, particularly in the case of British exploration in the Eighteenth and Nineteenth Centuries, artists encouraged the heroic and mythical notion of the continent. In more recent years, Antarctica has become a site for essential scientific research, from which the world can learn about changes in climate, rising sea levels and the shifting environment in order to assess the state of the planet as a whole. Antarctica is now often presented through satellite imagery, data and research, documentary photography and ecotourism. A saturation of, or indeed an

[3] Gina Irish, 'Southbound', *Art New Zealand,* Issue 117, Summer 2005-2006, available online https://www.art-newzealand.com/Issue117/southbound.htm , accessed 5/2/2019.

ease of access to this imagery means that the world now 'sees' more of Antarctica than ever before. As Joyce Campbell has said of Antarctica, "like any idealised subject, we know it both too well and not at all."[4] This assessment summarises the ways that imaging of Antarctica impacts on distant imaginings of the place. Campbell's critique underscores the need for criticality when looking at Antarctic imagery that is created, proliferated and consumed.

When discussing the ecology of Antarctica, it's interconnectedness with the world and its relationships with different groups, it is logical to employ what Alan C. Braddock and Dr. Christoph Irmscher have outlined as an 'ecocritical perspective'. In their 2009 book, *A Keener Perception: Ecocritical Studies in American Art History,* the notion of contemporary ecocriticism and the benefits of approaching art history from such a perspective is addressed through a diverse range of essays, which traverse a variety of disciplines, theories, and perspectives. Perhaps most pressingly, the text underscores the value of taking an ecological approach in arts research. The framework of ecocriticism becomes the essential for discussing the ways that art practice connects with environment, as the authors addressed in their introduction:

> by looking beyond binary abstractions such as nature/culture or pristine wilderness/concrete jungle, ecocritical art history warily avoids romantic pitfalls while registering a new sense of environmental breadth and ethics in interpretation.[5]

Braddock and Irmscher underscore that employing an ecocritical approach to art history encompasses a wide reaching and diverse approach to interpretation. From this foundation the process of ecocriticism allows for a range of disciplines to become valid in discussing contemporary art, broadening the ways that art is conceived of and interpreted in a range of contexts. The essays included in Braddock and Irmscher's book support their theories that ecocritical responses can strengthen understanding. For instance, in Rebecca Solnit's contribution, 'Every Corner is Alive, Eliot Porter as an Environmentalist and Artist' the author states that "a great success in art practice is not to become what we look at, but rather, how we see."[6] Further, Finis Dunaway states that the work of photographer Subhankar Banerjee

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[4] Sophie Jerram, 'Claims on Beauty', *New Zealand Journal of Photography,* no. 65, 2007, p. 10.
[5] Alan C. Braddock and Christoph Irmscher, 'Introduction', *A Keener Perception: Ecocritical Studies in American Art History,* Alabama: University of Alabama Press, 2009, p. 9.
[6] Solnit, 'Every Corner is Alive', Braddock and Irmscher, *A Keener Perception,* p. 214.

signals an "alternative perspective" of the Arctic which suggests that this region is not remote and distant but rather is deeply connected to international geo-political and environmental systems.[7] The depth that an ecocritical approach can offer to art historical discussions expands how contemporary arts are interpreted, and indeed, how the fields of arts and humanities are understood more generally. Timothy Morton's *The Ecological Thought* (2010) further explores ideas of ecological criticism. Morton details that his perception of ecological thought is of a process which aims to "join the dots and see that everything is interconnected".[8] Just as Dunaway states that an alternative, ecocritical perspective can offer the chance to interrogate the interconnectedness of the world, Morton underscores the importance of joining the dots. In drawing together a multitude of disciplines and theories, ecocriticism can transform our understanding of individual spheres of knowledge. Morton's additions to the ecocritical dialogue demonstrate the immense value of diversifying thought. The more everything is seen as interconnected, "the more our world opens up."[9] The foundational concept of considering all things in relation to others provides important framework for the following thesis.

Antarctica and the Humanities (2016), edited by Peder Roberts, Lize-Marie van der Watt and Adrian Howkins, advocates for the important contributions made by the humanities in understanding Antarctica today. In placing emphasis on the cultural relevance and value of Antarctica, the authors highlight the ways that the continent can be considered as a part of wider conversations.

> For a continent that is often depicted as paradigmatically non-human, it has generated a great deal of art and literature (as well as science), testament to a significant presence in cultural imaginations.[10]

Roberts, Howkins and van der Watt have identified that though Antarctica is so often considered a "non-human", science-focused location, it can – and indeed should – be considered as a more varied and complex place in public imagination. Similar to Morton's

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[7] Finis Dunaway, 'Reframing the Last Frontier, Subhankar Banerjee and the Visual Politics of the Arctic National Wildlife Refuge', Braddock and Irmscher, *A Keener Perception,* p. 255.
[8] Timothy Morton, *The Ecological Thought,* London: Harvard University Press, 2010, p. 1.
[9] Ibid.
[10] Peder Roberts, Adrian Howkins and Lize-Marie van der Watt, *Antarctica and the Humanities,* London: Macmillan Publishers Ltd, 2016, p. 2.

theories, these authors believe that this continent should no longer be considered as separate from the world and its cultural production, but instead be as inherently a part of this economy of imagery, literature and thought. The work of Roberts, Howkins and van der Watt elaborates upon a building field of ecocritical theory and applies such theories specifically to the ways that Antarctica is considered.

Providing the often-overlooked humanities perspective of Antarctic history is the foundation for Klauss Dodds, Alan D. Hemmings and Peder Roberts' 2017 book *Handbook on the Politics of Antarctica.* In particular, this text provides an illuminating, interdisciplinary perspective on how Antarctica is represented to the world, and the implications of this. In the introduction to this text, Dodds, Hemmings and Roberts state:

> While we have become accustomed to thinking of earlier Antarctic expeditions as heroic and glorious while nevertheless being flawed and even disastrous, we are less comfortable with thinking of the governance system of modern Antarctica as a structure the ideals of which might be lauded without precluding rigorous analysis of myths of stability and inevitable progress.[11]

These authors underscore that while Antarctica's history of discovery and expedition are well established, the realities of the place are very often overlooked or misrepresented, and therefore require reinvigorated interrogation. T. J. Demos has articulated the notion that constantly expanding views of temporal and spatial scales can exceed human comprehension, and thereby confront conventional representational systems.[12] Demos' point being that the realities of the anthropogenically impacted state of the world can cause discomfort and uncertainty. In turn, there appears to be a disconnect between representations of Antarctica specifically and the complex, interconnected state of the world as a whole. Throughout this thesis, the artists discussed often draw on this disconnect and discomfort; using emotional responses to highlight issues of representation and mediation which confront the production and consumption of media throughout the world.

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[11] Klauss Dodds, Adrian D. Hemmings and Peder Roberts, *Handbook on the Politics of Antarctica,* Cheltenham: Edward Elgar Publishing, 2017, p. 9.

[12] T. J. Demos, *Against the Anthropocene, Visual Culture and Environment Today,* Germany: Sternberg Press, 2019, p. 11.

It is interesting to note that many of the texts referred to in this thesis are relatively recent publications. Not only does this reflect the relevance of these texts to a thesis regarding specifically contemporary art practice, but it also highlights the fact that humanities-based thinking of Antarctica is still a relatively recent practice. The recent development of texts and research of environmental humanities, and Antarctic humanities specifically, seems to point towards a desire for diversification of understandings of the world.

Having established this framework of ecocriticism, chapter one begins this thesis by pinpointing some of the ways that Antarctica has been represented since its imagined inception centuries ago. These historic representations of Antarctica have played essential parts in the creation of an imagined Antarctica (or "Antarcticas"). This chapter touches on some of the earliest preconceptions about a southern continent, and tracks some of the key events in the following centuries. Continuing on to the present day, chapter two focuses specifically on the intersections between scientific research and artistic practice. As a site that has been identified as a location of global scientific endeavours through the Antarctic Treaty System, Antarctica is often seen predominantly as an informational resource. This chapter explores the differing representations of the continent produced by science and art, the persistent prioritisation of scientific efforts in the region, the barriers to artistic production in Antarctica and the promising outcomes of collaboration between these historically separate fields. Projects by Anna McKee, Xavier Cortada, Chris Drury and Gabby O'Connor become case studies of the ways in which artists are attempting to communicate their understandings of Antarctica, in this era of anthropogenic climate change, to their audiences.

The third chapter of this thesis discusses issues around tourism of Antarctica, specifically, a discussion of artists who both critique and participate in the cycles of tourism to Antarctica. The works of Adele Jackson, Anne Noble and Alexis Rockman exemplify key points in this conversation, each embracing their positions within the Antarctic tourism industry, their privilege to travel, the impacts of such experiences and the modes of communication that their work can participate in. These artists explore the ways that the tourism industry often plays upon the construction of romantic 'Nature' as an example of environment. In presenting a specifically framed set of natural features in order to inspire some form of the Sublime, these agencies package Antarctica for 'sale' to their potential clients. Antarctica is regularly

presented as an 'untouched wilderness', somehow separate from the rest of the world and supposedly remaining as a prime example of a world before humanity. While it is now commonly understood that this is in fact not the case, the imagery and accompanying narrative persist. Artists such as Jackson, Noble and Rockman each address the Antarctica constructed for the purposes of tourism, critiquing and undermining what is so often presented as the true wilderness of the south. These artists use their practice to comment on the cycles of tourism, their own implicit roles in these, and the ways that the tourism industry has and continues to frame Antarctica in heroic and mythical terms.

The final chapter explores the ways that Antarctica is represented through the lens of the science fiction genre. Joyce Campbell, Connie Samaras, Ronnie van Hout and Pierre Huyghe have each created works that directly reference key themes of the sci-fi genre: the contemporary sublime, the uncanny, the undermining of 'truth', and in Huyghe's case, complete disruptions of 'reality' as his audience might understand it. This chapter serves to underscore the themes of that which is unknown, uncertain and unfamiliar – each of these commonly employed in representations of Antarctica as an isolated, extreme site of technological and scientific exploration. What comes to the fore here is the way that science fiction (sci-fi) media – and its themes – use a separation from reality in order to dissect and interrogate the issues of contemporary era. The separation that sci-fi can offer has at times been criticised as a dangerous lens which focuses on the future rather than engaging with the issues of the present. In contrast, Shelley Streeby has argued that the separation from reality which is offered by speculative genres – such as sci-fi – is used to remember the past and to imagine futures, helping audiences to think critically and engage with the present.[13] Streeby's assessment underscores the ways that contemporary artists are employing the themes of sci-fi in their practice: embracing the notion of simultaneously looking forward and backward artists are able to pose questions and critiques of the present.

The themes discussed throughout this thesis underscore the ways that artistic approaches to Antarctic subject matter can address broader social, cultural and ecological concerns.

[13] Shelley Streeby, *Imagining the Future of Climate Change, World-making through science fiction and activism,* California: University of California Press, 2018, p. 5.

Particularly in an era of accelerated and exacerbated climate change, the ever shifting state of Antarctica can serve to embody these concerns. In the process of expressing alternative narratives and experiences of Antarctica through contemporary art practice, the artists discussed here can offer a variety of channels through which their audiences can engage with Antarctic and global issues.

CHAPTER 1
Heroic Age to today: creations of an imagined Antarctica

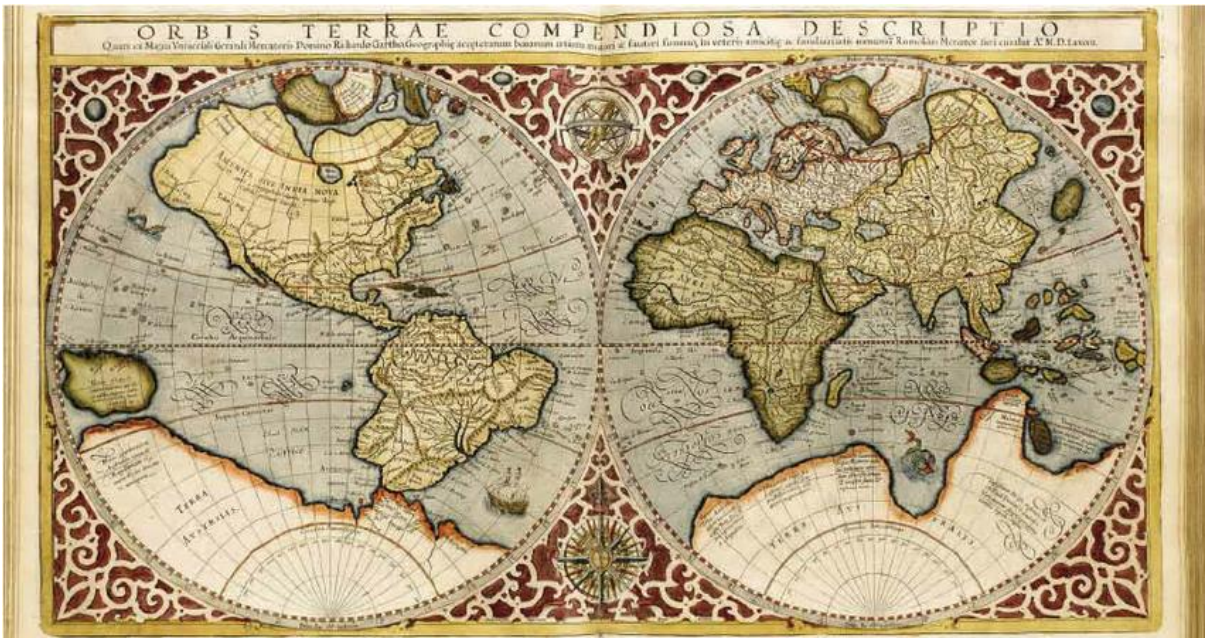

Figure 1.1: Rumold Mercator's Orbis Terrae Compendiosa Descriptio, dated 1587.

Antarctica, or at least some form of a polar south, has been a focus of popular imagination since well before the first known human contact with the continent in the eighteenth century. The ancient Greeks hypothesized about the existence of 'Antarktos': a counter to the Northern Arctic, an anti-Arctic.[14] In and of itself, the 'anti-Arctic' title evokes a mysterious perception of what the Southern continent could have been; the title gives little detail other than a rough geographic location. The 'anti-Arctic' descriptor implies the bottom of the globe, enforcing a North/South dichotomy and the contrast of the 'unknown South' to the 'known North'. The speculated 'anti-Arctic' shaped perceptions of the actual Southern continent, even as humans became increasingly aware of the realities of the place. Since these early preconceptions, Antarctica has grown in the popular imagination as a place of wilderness and adventure. In the centuries that followed, Antarctica was more firmly discovered: it was developed as a major site for exploration in the late nineteenth and early twentieth centuries, and later, as a site for extensive scientific endeavours. The history of Antarctica as an isolated and little-known

[14] Juan Francisco Salazar and Elias Barticevic, 'Digital Storytelling Antarctica', *Critical Arts: A South-North Journal of Cultural and Media Studies,* Vol. 29, No. 5, 2015, p. 577.

geography has shaped its global image, from a stage set for 'heroic' activity, to a resource-rich ecology, to a site of scientific interest. In examining key points in Antarctic history, it is possible to unravel some of the representational history of the place, establishing a base from which to explore contemporary representations of the continent.

Following on from the basis of the Greek creation of Antarktos, Flemish cartographer Rumold Mercator included an unknown southern land mass on their map of the world in 1587.[15] This continent, at the time named Terra Australis Incognita, was depicted as the southern-most on the globe, despite Europeans having no visual evidence of its existence. Indeed, Terra Australis Incognita would elude those searching for it for centuries: Abel Tasman's 1642 expedition to the South Pacific concluded without having located the continent; later, in 1773, James Cook and his Resolution expedition also failed to locate Antarctica, despite their specific tasking to do so. Though the Resolution expedition crossed the Antarctic Circle, circumnavigated the globe, and proved that neither Australia nor New Zealand were visibly attached to a more southerly continent, it could not prove the existence of Antarctica itself, beyond icebergs encountered in the Southern Ocean.[16] The ongoing mystery, hanging like a shadow over early Antarctic expeditions, established a narrative of exploration and discovery that presented Antarctica as a mythical and mysterious 'frontier'. A growing myth of the Antarctic frontier accelerated desires to find the southern continent, to map it, to understand it and to 'conquer' it. The mystery of Terra Australis Incognita continued to intensify, as despite widespread certainty that this place was more than fiction, no one was able to prove its existence until almost fifty years later. In 1820 three separate expeditions (from Russia, Britain and the United States) officially sighted Antarctic land. From this point on, explorers – along with those hoping to participate in growing seal and whale trades - navigated to the South to further understand and take advantage of the resources of what was considered a final frontier. Throughout the early nineteenth century there were extensive mapping operations, not only proving that Antarctica did exist, but beginning to specify regions and coastlines of the continent. Alongside this mapping came the naming of regions, including many eponymous examples such as the

[15] Nigel Roberts "Story: Antarctica and New Zealand", *Te Ara Encyclopedia of New Zealand,* https://teara.govt.nz/en/antarctica-and-new-zealand/page-1 accessed 14/5/2018.
[16] Ibid.

Ross Sea and Ross Island in 1840-41 after James Clark Ross of the British Royal Navy.[17] Before images of Antarctica emerged, the designated names of geographic features spread around the world, proliferating the perception of the continent as claimed, conquered and 'colonised'.[18]

Elizabeth Leane's studies of early representations of Antarctica describe how the relatively belated nature of humanity's encounters with Antarctica, along with its location and unknown geographic characteristics, determined the types of representations that were circulated about the region.[19] Human exposure to visual representations of Antarctica has always been mediated, but the means and processes through which this has happened have changed throughout time alongside developments in knowledge and technology. Perceptions and general understanding of the landscape grew significantly with increased access to mapping and the resulting cartographic representations of the region. With this increasing knowledge, which fuelled perceptions of the place as remote and extreme, the 'Heroic Age' of Antarctic exploration began. This period, generally identified as occurring in the late Nineteenth and early Twentieth centuries, is characterised by the 'race to the south pole'. Throughout the Heroic Age, the world was exposed to Antarctica through the very specific lenses of nationalism, masculinity and adventure. For instance, *The Scientific American* published news articles and columns which described to its readers the key figures and details of ongoing expeditions. In 2013, Susan Solomon reviewed how such editions of the journal were "replete with the rich rewards" that Antarctic expeditions won in being able to answer long-standing questions about the region. Solomon's assessment of these historic journals describes the ways in which Antarctic expeditions were framed at the time by those funding and participating in the journeys. These types of public discussions about the "glory" of Antarctic expeditions would surely cement the heroic reputation of the day. Further, *The Scientific American*

[17] Ibid.

[18] The notion of colonisation in Antarctica is an interesting topic, one which requires much discussion that is not included in this thesis. Many debates form around whether the traditional understanding of colonisation - as that which concerns the oppression of people and cultures in the process of imperial expansion – applies to a continent with no indigenous or long-term residents before its discovery by European explorers. However, it is relevant to consider that in an era of ecological and anthropogenic thought – this term becomes loaded in the possibilities of environmental colonisation, and the other implications of European histories of claiming territory and resources.

[19] Elizabeth Leane, 'Fictionalizing Antarctica', Dodds, Hemmings, and Roberts, *Handbook on the Politics of Antarctica,* p. 23.

published images that were taken using the developing photographic technology of the time, offering their readers the chance to view the "polar vistas that were sure to inspire and motivate any scientifically-minded American reader."[20]

Figure 1.2: Frank Hurley, The efforts of Whetter and Close to get ice at Cape Denison, 1915, toned gelatin silver, image 35.5 x 44.8 cm.

Robert Rosenblum has summarised Edmund Burke's theories of the Sublime, stating that it can be considered as a "semantic container for the murky new Romantic experiences of awe, terror, boundlessness and divinity that began to rupture the decorous confines of earlier aesthetic systems".[21] Burke's considerations differentiated between what was understood in a Romantic sense as beautiful, from that which inspired feelings of awe.[22] This sense of awe that Burke referred to would more than likely be inspired by supposed divine intervention,

[20] Susan Solomon, 'To the Ends of the Earth: The Heroic Age of Polar Exploration', *The Scientific American,* 17/01/2013, https://www.scientificamerican.com/article/to-the-ends-of-the-earth-polar-exploration/ accessed 8/5/2018.
[21] Robert Rosenblum, 'The Abstract Sublime', Simon Morley, *The Sublime, documents of contemporary art,* London: Whitechapel Galley, 2010, p108.
[22] Morton D. Paley, *The Apocolyptic Sublime,* New Haven: Yale University Press, 1986, p. 2.

through the means of the most powerful natural forces.[23] The sublimity of the natural features of Antarctica were emphasised by photographers such as Frank Hurley (1885-1962), who along with other voyage photographers, played an impressive roles in the creation of an imagined Antarctica. The images that were produced by artists such as Hurley focused largely on the Sublime nature of the icy landscape: the power of the Antarctic environment conferring strength onto the (male) explorers as a result of their supposed 'mastery' over it. The images by expedition artists were the only visual exposure that the wider world had to the region; therefore, whatever compositions these artists created shaped general understanding of Antarctica. The heroic perceptions of Antarctica that had been crafted from dramatic photography play directly into the 'frontier' myth of Antarctica, and the notion that humans were 'conquering' the continent became prevalent in public perceptions.[24]

Hurley's 1915 image, *The efforts of Whetter and Close to get ice at Cape Denison*, epitomises the heroic narrative that was often presented by voyage photographers. The two figures work tirelessly – as can also be inferred from the image title – and are engulfed in the extreme weather of Antarctica. The image is blurred and rough, and the high contrast between light and dark makes it especially dramatic. We also see evidence of architecture in the background – a sign of established human existence in the area. This image portrays to its viewers the danger and intensity of life in Antarctica for expedition crews and implies the characteristics of strength and courage needed to succeed in Antarctic missions. Similarly, Hurley's photograph *The Aurora in McMurdo Sound nearing Cape Evans* depicts the dramatic beauty of Antarctic exploration. The hand-coloured glass lantern slide shows the ship The Aurora surrounded by sea ice and dark skies. Seemingly calm, the ocean glistens, but the surrounding ice indicates a remaining threat of danger, especially in the form of extreme temperatures. The coloured sky shows the viewer the majesty of the Antarctic night sky, free from city smog and artificial light, and with a depth of colours even in the dark of night. Hurley has provided the viewer with a narrative that draws on characteristics of the Sublime: while the image is beautiful and awe-inspiring, the possible danger of the environment is kept at a distance. For viewers, this

[23] Ibid. p. 8.
[24] The heroic age perceptions were also influence by literature, both fiction and non-fiction. Explorers wrote diaries, and other writers explored notions of Antarctica as effective narrative motifs to represent themes such as danger, mystery and adventure.

particular representation kept the realities of the place at bay and revealed little of the everyday difficulties of Antarctic life and the impacts that human intervention was beginning to have on the continent. While the exposure of the general population to Antarctic imagery allowed for awareness of the geographic location of the place, the representations given did not always allow for the complexity of reality.

Figure 1.3: Frank Hurley, The Aurora in McMurdo Sound nearing Cape Evans, glass lantern slide, hand coloured.

While Hurley is best known for his photography, other media were just as influential in representing Antarctica to the world. George Marston acted as a voyage artist for Ernest Shackleton on both the 1907-1909 Nimrod and the 1914-1917 Endurance expeditions. Alongside his painting practice, Marston is credited with having illustrated the first book published in Antarctica: *Aurora Australis* was completed in 1908. Shackleton wrote the preface to the publication, acknowledging Marston's illustrations, and stating the difficulties of producing a book in such an extreme environment. It is clear from Marston's images that the Nimrod expedition was difficult and tiring, yet a rewarding venture, nonetheless. Marston's

image of a night watchman shows the man to be having strange, consuming dreams of reaching the South Pole – the initial (and unachieved) goal of the Nimrod. The delusions of the dream reflect a kind of exhaustion and passion induced state of mind; the extremity of the environment and the lack of success are clearly taking their toll on the man. Further, an illustration of the Erebus crater rim portrays an imminent sense of danger, the bright smoke in contrast to the dark ground, and figures that draw the viewer's eye to the centre of the page. We see something of the scale at which the men were encountering the environment, and the lack of detail in the etching is representative of their limited senses during their ascent to the summit. T. W. Edgeworth David wrote the passage named "The Ascent of Erebus" which depicts the expeditions journey to the summit of Mount Erebus:

> Our progress was painfully slow, as the altitude and cold combined to make respiration difficult…A shout of joy and surprise broke from the leading files, when…the edge of the active crater was reached…The scene that now suddenly burst upon us was magnificent and awe-inspiring. We stood on the verge of a vast abyss, and at first could neither see to the bottom, nor across it, on account of the huge mass of steam filling the crater and soaring aloft in a column 500 to 1,000 feet high.[25]

The illustration and its accompanying retelling capture the danger and magnitude of the crater summit of Erebus. It would explain to readers in substantial detail how the expedition crew reached the summit and 'conquered' yet another geographic feature of Antarctica. A publication such as *Aurora Australis* was key to the contemporary perceptions of Antarctica; Marston's visual representations, along with the text of the book, would be engaging evidence of the expedition. Images such as Hurley's and Marston's play into the notion of the Sublime that was so key to Heroic Age representations of Antarctica, and that continues to be employed in the Twenty-first Century. Both artists have embraced the aesthetic qualities of the danger and adventure of the expeditions they were a part of, depicting the missions in ways that allow their viewers to sense the extremity and impending threats involved in exploration, from the comfort of their daily lives.

[25] T. W. Edgeworth David, 'The Ascent of Mount Erebus', *Aurora Australis,* Antarctica: British Antarctic Expedition Headquarters, 1908, page numbers unknown.

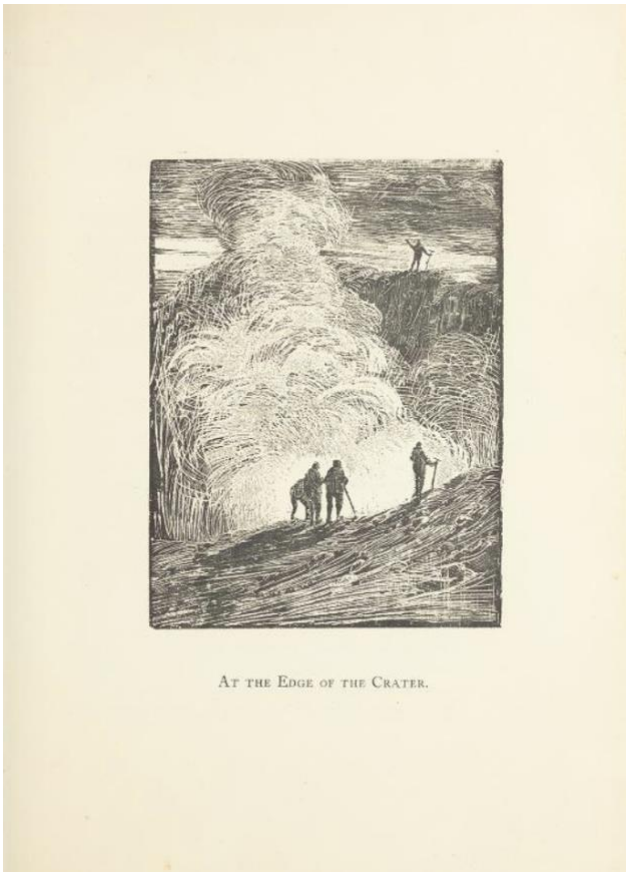

Figure 1.4: Marston's etching of a daydreaming Shackleton, Aurora Australis (left).

Figure 1.5: Marston's etching of the crater rim of Mount Erebus, Aurora Australis (right).

After World War Two the global understanding of Antarctic territory was in flux, and a range of nations began to stake claims to the land (as well as to the ice and ocean). Throughout the mid-twentieth century the Antarctic region came to be understood as an international territory, reserved for science and peace.[26] In 1959, the Antarctic Treaty System (ATS) was signed by all countries who had scientists active in the Antarctic region during the 1957-1958 International Geophysical Year (IGY). This treaty brought together the nations of Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, the Soviet Union, South Africa, the United Kingdom and the United States of America. From these nations, seven claimant nations were identified as having territorial claims: Argentina, Australia, Chile, France, New

[26] Nigel Roberts, 'Story: Antarctica and New Zealand', *Te Ara The Encyclopedia of New Zealand*, https://teara.govt.nz/en/antarctica-and-new-zealand/page-4, accessed 10/05/2019.

Zealand, Norway and the United Kingdom.[27] The ATS – signed during the tensions of the Cold War – slowed the growing competition for power and control over Antarctic lands and oceans, and helped to ensure that the region remained demilitarized. The absence of the USA and the Soviet Union from claimant status further enforced the peaceful nature of the region in a time of global conflict.[28] During this geopolitical uncertainty, the representation of Antarctica as a unified, global location could be seen as a soothing facet of global politics. The narrative that nations could indeed come together for their best unified interests, in the name of science and peace, was a contrast to international rhetoric at the time. With the establishment of the ATS, Antarctica became a symbol for global community, as well as scientific and technological advances. Alessandro Antonello has explored the contemporary use of the term 'global commons' to describe Antarctica. While this term certainly describes the sharing of resources, rights and the state of coexistence on the continent, it does omit the significant political actions and contestations that lie behind the ATS and the Antarctic region more broadly. The representation of Antarctica as a 'global commons' supports a positive representation of global relations and the state of Antarctica, but simultaneously embeds the power of Western industrialised nations that stake a claim in the region.[29] Antonello's interrogation of the term reveals the ways in which political bodies – and others with vested interests – have the ability to craft contemporary representations of the status of Antarctica to meet their best interests. The crafting of the 'global commons' of Antarctica secures the status of the ATS, as well as the power of claimant states, rather than providing any kind of critical assessment of the implications of such a governance system.[30]

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[27] Author Unknown, 'The Antarctic Treaty', *Secretariat of the Antarctic Treaty,* https://www.ats.aq/e/ats.htm, accessed 2/05/2018.

[28] The Antarctic Treaty System now has 53 signed parties. ('The Antarctic Treaty', *Secretariat of the Antarctic Treaty,* https://www.ats.aq/e/ats.htm, accessed 2/05/2018).

[29] Alessandro Antonello, 'Finding Place in Antarctica', pp181-203, Roberts, van der Watt, and Howkins, *Antarctica and the Humanities,* p. 188.

[30] This is not to say that the ATS is inherently an incapable or untrustworthy governance system, but rather that any system of politicizing place should be adequately assessed and viewed critically in order to avoid any exploitation or misuse of such power.

Figure 1.6: Blue Marble, December 1972, National Aeronautics and Space Administration (NASA).

Throughout the years following the establishment of the ATS, there were major advances in science and technology. For instance, the developments in space exploration were continuing to impress and excite the world, capturing public imagination about the possibilities for humanity's future. The 'whole earth photo', taken in 1972 from the Apollo 17, offers an opportunity to explore the impacts of visual representation in this era. The image, formally titled *Blue Marble,* shows the first image presented to the population which claimed to show the 'entire globe'. In and of itself, this common phrasing omits the reality that only half of the globe is represented in this photograph – furthering the validity of critiques of those representations which mediate and alter reality. *Blue Marble* draws attention to the scale of the Earth, making it appear as much smaller than typically considered. This photograph brought to the fore the idea that all humans are connected through our shared planet, and that this planet is tiny in the greater scheme of the universe. The production of such a visceral and capturing image sparked popular imagination: it allowed a tangible relationship with the

globe as a whole and has become an icon of ecological and environmental thought.[31] The developments of space exploration have some parallels with Antarctic exploration: adventure, danger and mystery. Particularly in these two cases, where the average person in this lifetime is unlikely to visit either location, the visual representations that are circulated are the only way to engage with the subject. Therefore, images have a profound impact on perceptions of these places and have the ability to make a viewer sympathetic to whichever cause the artist (or their sponsors) choose. In the past, visual representations of Antarctica have been used to encourage public support for the discovery and exploration of the continent. More recently, however, priorities have begun to shift: visual representations of Antarctica - along with its geo-political and economic realities - are now beginning to reflect the dire environmental and ecological challenges that contemporary human life is inflicting upon the region, and the rest of the earth.

The ATS has maintained its position as a shared protocol in the region, supported by a range of protocols and conventions that were added to the international treaty to ensure that Antarctica would be protected in the face of environmental, conservational and territorial conflicts. Notably, The Environment Protocol (also known as the Madrid Protocol, due to the location of its signing) of 1991 ensured that Antarctica was a "natural reserve devoted to peace and science", banning any kind of mineral based activity other than scientific research.[32] An important note on the Environment Protocol is that up until its expiry in 2048, the protocol can only be altered through unanimous agreement of the parties of the ATS, entrenching the power of this group of nations.[33] Many commentators are certain of the stability and necessity of the ATS and its surrounding protocols, believing that these barriers will protect Antarctica, as much as possible, from human intervention. However, others question the system's integrity in a challenging climate, where supporting a growing global population as well as other biophysical and geo-political factors that will become even more pressing in the coming decades.[34] It is thought by some that these factors will strain the agreements, and cause

[31] Ralo Mayer, 'Beyond the Blue Marble', *Acta Astronautica,* 128, 2016, p. 573.
[32] Author Unknown, 'The Protocol on Environmental Protection to the Antarctic Treaty', *Secretariat of the Antarctic Treaty*, https://www.ats.aq/e/ep.htm, accessed 2/05/2018.
[33] Ibid.
[34] Oran R. Yound, 'Foreword: Why should we take an interest in what happens in Antarctica?', Dodds, Hemmings and Roberts, *Handbook on the Politics of Antarctica*, p. xv.

debate about the importance of conservation and resources. While Antarctica has often been considered separate from global politics, economics and conflicts, the sheer number of agreements, protocols and nations involved would suggest otherwise. In fact, the number of political agreements made regarding the region make it a highly politicised environment that is inherently linked to international issues.

Elizabeth Leane has explored representations of Antarctica in literary contexts, stating that fictional representations of reality can have extremely powerful performative functions.[35] Leane has commented that many representations of Antarctica stem from traditional tropes of heroism, exploration and adventure. Literary representations – as with representations in the visual arts – often present narratives of Antarctica as separate to and contrasting with the rest of the world; as a competing realm that is natural not modernised, that is empty not populated, and that is distant rather than near or known. From the establishment of the ATS, we can see that Antarctica was no longer distant from global geo-politics, economics and culture, but rather is an integral part of these exchanges. Persisting 'heroic' perceptions of Antarctica are dangerous if left untempered by reality. The understanding of Antarctica as separate to and far away from the rest of the world implies a disconnect between the general population and the dire realities of the Antarctic continent. The issues of climate change, ice melt, habitat disruption, resource scarcity and global politics are silenced by the notion that all of this is happening too far away for it to matter to anyone on a day-to-day basis. Antarctica appears almost as distant as the moon – a comparison enhanced in the public imagination by markedly similar twentieth-century narratives of exploration, adventure and national advancement. Leane argues that the arts and humanities will play a large role in deepening the understanding of the Antarctic as a complex part of our global ecosystem.[36]

Recent advances in technology and science have brought about an entirely new wave of Antarctic representation. Scientists at the British Antarctic Survey have explained how the task of mapping of the Antarctic continent is a massive undertaking: both its land and ice masses

[35] Elizabeth Leane, 'Fictionalizing Antarctica', p. 22.
[36] Ibid. p. 33.

are expansive, and its exploration history is relatively short.[37] Largely through the use of satellite imagery and the escalation of photographic technologies, the world has never had a clearer, or more broadly accessible means of viewing the Antarctic continent in its entirety. The proliferation of scientific and satellite images not only creates a saturation of Antarctic imagery, but also presents a new kind of perception of the place, unlike what has existed previously. For years the mapping and geographical understanding of Antarctica was described as more of a "black hole than a white continent."[38] The idea of 'not knowing' not only encourages the mystery of the 'Antarctic frontier', but it also goes against the grain of the desire to understand the world. In not knowing a place, we also do not know the impact we are having on that place. Without being able to see visual evidence of the damage we are doing the majority of the global population will assume that no damage is being done. The first map of Antarctica generally accepted as accurate was released in the 1980s. Over twenty years later, in 2007, a Landsat Image Mosaic of Antarctica (LIMA) was unveiled to the world. The result of seven years of collecting satellite imagery, the LIMA represents the most comprehensive satellite photographic representation of Antarctica.[39] The dedicated LIMA website explains the goals of the image:

> LIMA is an international effort, supports current scientific polar research, encourages new projects, and helps the general public visualize Antarctica and changes happening to this southernmost environment. Researchers and the general public can download LIMA and all of the component Landsat scenes at no charge.[40]

This image – or rather the combined mosaic of images – represents the contemporary Antarctica of 2000-2007. It is not reality itself, but a representation of reality; a perception of reality creates a level of trust between the viewer and the creators of the image. It also allows the viewer to see a version of reality that highlights the environmental, ecological and other contemporary concerns that face Antarctica. The image aids in the visualisation of Antarctica

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[37] Author Unknown, 'Mapping Antarctica', *British Antarctic Survey,* https://www.bas.ac.uk/data/our-data/maps/mapping-antarctica/ accessed 3/5/2018.
[38] Ibid.
[39] Ibid.
[40] Author Unknown, 'Landsat Image Mosaic of Antarctica', https://lima.usgs.gov/ accessed 3/5/2018.

and in turn, the strengthening of understanding of the realities of climate change and global warming on the icy continent.

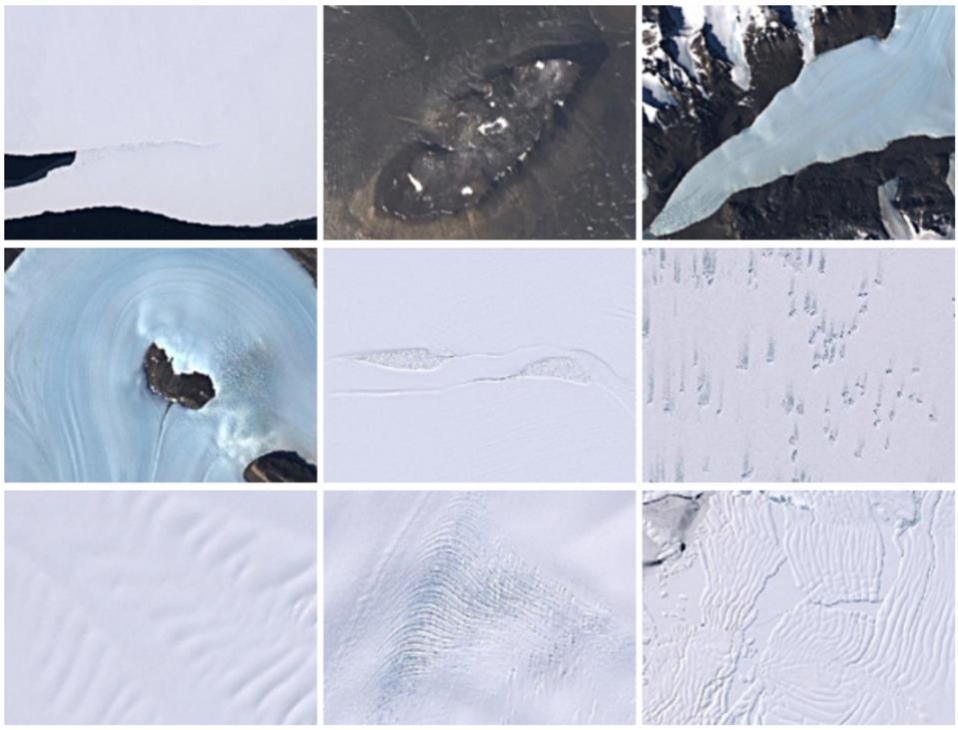

Figure 1.7: Selection of images used on the 'Antarctic Mysteries' page of the LIMA educational website, NASA.

Not only has the growth of satellite and photographic technology aided in proliferating a more realistic, scientific perception of Antarctica, but it has also augmented the knowledge gained from historic archival material, maps and documents that have resulted from over one hundred years of Antarctic exploration. The British Antarctic Survey explains that the implementation of modern satellite services alongside historic material has allowed for comparisons between the current state of Antarctica and how it was in the early twentieth century. For example, the melting of glaciers has been marked and understood by these two sets of data.[41] It is possible to use such data to create a clear narrative of Antarctic geographic change. Particularly from a public knowledge point of view, images and visual evidence make the case for global warming and environmental crisis. A tangible comparison, especially in the form of photographic images, brings a reality to the subject matter. Visual representations

[41] Author Unknown, 'Mapping Antarctica', *British Antarctic Survey.*

such as *Blue Marble* and LIMA create strong engagements between viewers and the subject matter.

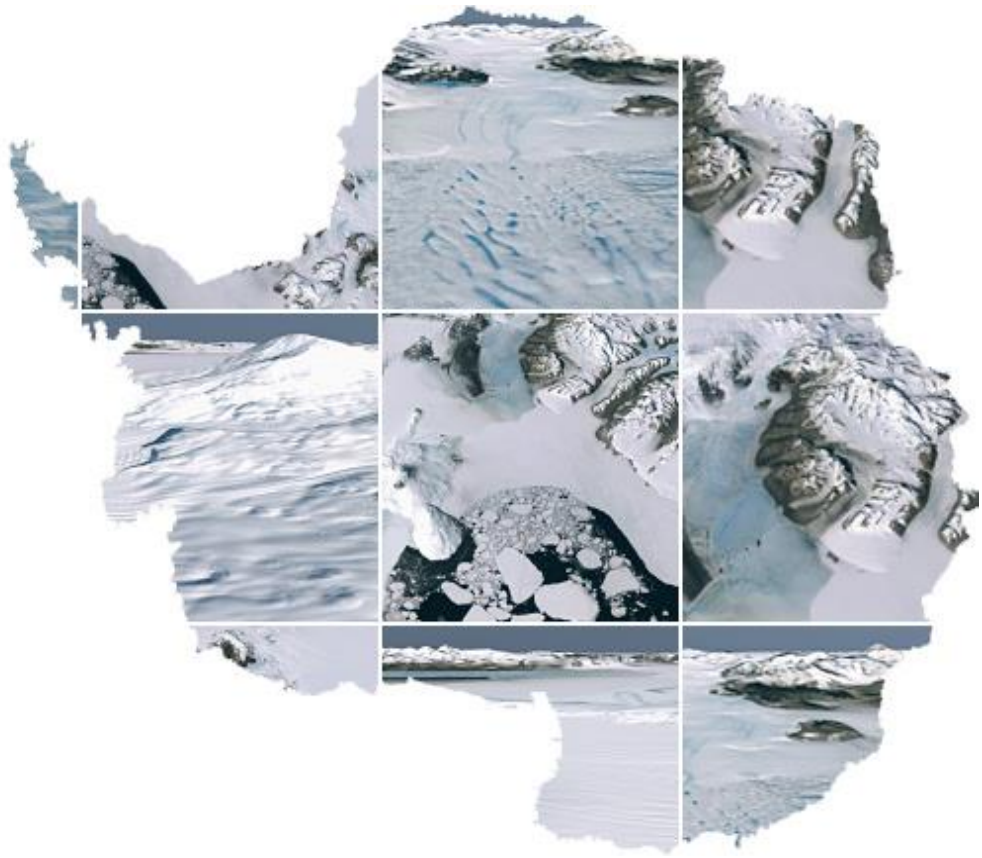

Figure 1.8: Collage of images from LIMA in the shape of the Antarctic land/ice sheet mass, NASA.

The LIMA website was a two-year online project aimed at proliferating the LIMA imagery and the information it gathered and furthering its environmental cause. Though the page is no longer actively monitored, it retains its resources and acts as a portal for engagement with Antarctic concerns. The collection of satellite images of Antarctica used on the web page for LIMA is an example of one of the ways in which science organisations are thinking creatively, using their research material to engage with their audience. It would appear that NASA has realised that scientific research and imagery works well for a broad audience when displayed with creativity and elements of contemporary visual arts. For example, the 'Antarctic Mysteries' tab on the website offers abstracted, cropped images that reference geographic features of Antarctica. The page asks its user to try to decipher each image, then to click

through for more information. The minimal, abstracted tone of these images reflects the ways in which contemporary artists are using new ways to engage with Antarctic imagery to draw viewers' attention to smaller, lesser known details. Artists such as Anne Noble and Joyce Campbell often work with pared back, abstracted themes in order to draw attention to the intricacies and delicacy of the Antarctic landscape. These NASA images do the same: by drawing the viewer in close, to enable them to notice small details that usually go unnoticed, the viewer is drawn to the reality of Antarctica as an extreme, but highly fragile environment, rather than an imagined landscape.

The ATS and its subsequent agreements have been criticised in recent years for the ways in which a select group of nations have attempted (and succeeded) in establishing a system of governance in the region, informed on the basis of vested interest and propelled by a sense of urgency and the presumed importance of Western science and modernity. From the 1990s, scholars such as Lisa Bloom, Christy Collis, Elena Glasberg and Victoria Rosner have called into question the colonial nature of Antarctic treaty agreements, and have employed a framework of post-colonial theory to assess the representations of Antarctica presented to the world throughout the century.[42] They have explored the ways in which Antarctica is presented as a Western and specifically masculine environment when in fact it is one of the few environments without indigenous human populations. Dodds, Hemmings and Roberts point out that while we have become accustomed to, and comfortable with representations of Antarctic expeditions and engagements as heroic, glorious and adventurous, we are uncomfortable with the critical assessment of values, stability and 'progress' of the modern Antarctic governance system – the ATS.[43] Due to the lack of indigenous people in Antarctica, its history is vastly different from any other place on Earth. The initial explorers did not concern themselves with anthropology, archaeology or any other type of humanities-based study. Instead, science quickly became the central focus. Adrian Howkins has stated that since the signing of the Antarctic Treaty, the relationship between politics and science has grown to be more explicit in Antarctica than in any other place in the world.[44] Science is embedded as a key stone of the

[42] Dodds, Klaus; Hemmings, Alan D.; and Roberts, Peder, 'Introduction: the politics of Antarctica', Dodds, Hemmings, and Roberts, *Handbook on the Politics of Antarctica*, p. 4.
[43] Ibid. p. 9.
[44] Adrian Howkins, 'Emerging from the Shadow of Science', Roberts, van der Watt, and Howkins, *Antarctica and the Humanities*, p. 251.

ATS and has become its own form of geo-political currency in the contemporary era. Certainly, it has become the prevailing globalised language in Antarctica. Howkins argues that because of this, the humanities were on the back foot in Antarctic research from the outset.[45] The humanities and arts lend criticality in their ability to look beyond the obsolete binaries of nature/culture, wilderness/modernity and art/science. Though many representations of Antarctica still encourage a heroic, wild and sublime impression, we must remain critical and aware of the political nature of the place, along with its implications for geo-politics beyond the Antarctic continent.

In recent years the growth of artist residency programmes, ecotourism and Antarctic subject matter in popular culture have altered the ways in which the world comes into contact with the region. The roles of media and communication as agents beyond the fields of science and technology are evolving in ways which inherently diversify the representation of Antarctica. For instance, the establishment of state-sponsored humanities programmes has suggested that the nations in question hold the contributions of artists and writers in high regard.[46] Contemporary ecocritical forms of arts and humanities allow for a breadth of understanding and renewed perception of the complexity and reality of the world. These types of thinking have huge value in the contemporary era: with the issues of climate change and political tension linked to resource scarcity and inequality, it is explicitly clear that everything is connected. As Braddock and Irmscher have discussed, ecocritical art history and art practice not only engage with overtly sympathetic forms of environmental expression, but also with those that are indifferent or even hostile to such concerns.[47] In employing a range of perceptions, and engaging with a range of subject matters, contemporary artists have the ability to foster meaningful discourse through a transformation of environmental perception and contextual understanding.[48] Contemporary art practice has the ability not only to provide representations of Antarctica, but also to more deeply alter the ways that we perceive the place. By framing Antarctica in ways that reject and divert from historic notions of the sublime and the heroic, artists expand the lens of understanding of the continent. Contemporary artists

[45] Ibid. p. 255.
[46] Nations that hold artist residencies on the Antarctic continent include Argentina, Australia, the USA, and New Zealand.
[47] Braddock and Irmscher, *A Keener Perception: Ecocritical Studies in American Art History,* p. 9.
[48] Ibid. p. 2.

have also engaged with the scientific understandings of subjects such as Antarctica, and in doing so have often transformed scientific documentation into something meaningful, enduring and engaging to diverse audiences. Artist Janet Laurence summarised this approach, noting how in a contemporary age of saturation of visual representations, viewers need both the confronting documentation and aesthetic experiences that art can offer.[49] This balance can be achieved through artistic expression, and is key in order for complex concepts and abstract theories about the state of the world to become more widely accessible. While Laurence has touched on the notion that artists can transcend the gap between science and art, it is also an important note that artistic visual representations can also to some extent transcend language and time, becoming akin to a global vernacular for discussing contemporary issues that will and do impact the entire globe.

Antarctica has been the subject of visual representation for centuries; its mystery and extremity has captured popular imagination and served to perpetuate myths of wilderness and the 'final frontier'. Initial representations of the continent were overtly focused on the heroism and masculinity of exploration of the region, and due to this focus, the realities and complexities of the Antarctic environment were often omitted from public discourse. The reality of human intervention in the landscape was a side note to the celebration of expeditions to the continent. These myths persisted throughout the twentieth century, even after Antarctica had begun to be more deeply understood through extensive exploration and mapping. Even though the world became more aware of the geo-political realities of Antarctica through the signing of the ATS and the political agreements of the following decades, tourism and advertising industries continued to employ the heroic age tropes that were established as the norm for Antarctic visual representation. The tourism industry in particular found that the myth of the 'imagined Antarctica' was appealing to customers, as it was easy to sell as a travel destination and framed itself as a 'once-in-a-lifetime' opportunity. Contemporary artists are now following traditions of exploring new ways to react to their geographic, social, economic and political contexts. In doing so, many artists have found Antarctica to be an extremely

[49] Janet Laurence, paraphrased from a podcast titled "Artists Have Never Been More Important", recorded from a talk featuring Laurence, given at A Sydney Ideas and Sydney Environment Institute Event, 27 March 2018, available online at https://soundcloud.com/sydneyenvironmentinstitute/artists-have-never-been-more-important accessed 8/05/2018.

stimulating area of practice. The context of the southern continent allows artists not only to reject the narratives that have for so long framed perceptions of Antarctica, but also to engage directly with the environmental and political concerns that face our anthropogenic era. These artists have the ability to draw from a multitude of disciplines and offer an alternative perspective to the scientific view that has such dominance in thinking about the region. The following chapters will explore the ways in which contemporary artists are engaging with Antarctic subject matter and are responding to the aforementioned environmental and political concerns confronting the continent, and in turn, the rest of the world.

CHAPTER 2
Science and Art in Antarctica

In 2016, thousands of glass ampoules, sewn to hundreds of silk panels, hung in the Nevada Museum of Art (NMA). The tiny vials each held 0.2 millilitres of water retrieved from below the surface of Antarctica. These containers of Antarctic water made up the central feature of the installation *WAIS Reliquary: 68,000 Years of Ice.* Artist Anna McKee worked with Eric Steig from the University of Washington and with information gathered from the West Antarctica Ice Sheet Divide Ice Core project. McKee interpreted Steig's data, which directly informed both the formal and conceptual properties of the installation. For example, the number of ampoules included represented the 3,405 metres drilled. Each of the 678 silk panels symbolised one hundred years of ice, while the dimensions of the silk reflected isotope measurements – cumulatively forming a story of almost 68,000 years of global temperature changes. This installation became more than the sum of its parts: a collaboration between artistic representation and scientific data, it was a visual representation – a graph – of deep time and history. Levels of greenhouse gasses, varying surface temperatures, sea ice levels, average temperatures and even wind patterns on the continent could all be gauged from the ice samples pulled from the depths of the Antarctic continent. This information can tell scientists about what happened in the past, but it can also help us to understand what might happen in future. McKee has interpreted the information discovered from the project, transforming data into an immersive experience for her viewers. This artistic visualisation of scientific information offers the viewer an opportunity to approach the complexity of humans' anthropogenic impact on the earth. Just as McKee has done, many contemporary artists are regularly approaching environmental concerns from the perspective of visualising and interrogating scientific information. Xavier Cortada, Gabby O'Connor and Chris Drury each also engage with specifically Antarctic subject matter, visualising the challenges and realities of the continent today. Each of these artists embraces their position as a link between the scientific and the artistic, aiming to communicate scientific information in expansive and diverse ways.

Veronica Tello has argued that our imagination is not only something that mediates the "interior of the mind and the exterior of the world", but is in fact is a powerful force within us

which underpins our entire relationship with the world.[1] Our imagination, and therefore what shapes our imagination, changes how we think of, and respond to, our surroundings. What shapes public imagination then, becomes key to the way that people understand contemporary environmental, political and social issues. Tello's 2016 essay sought to interrogate the ways in which the anthropogenic crisis is given a narrative of cultural significance, and further how this is communicated in public arenas. The author specifically acknowledges the power that scientific sources have over the popular understanding of climate issues, and speaks of

> …a range of fears around environmental and social change, including melting ice-caps and rising sea levels, extreme weather events, loss of biodiversity, water toxicity, and many other phenomena. The terrifying sense of momentum and inevitability that is generated by the concept of environmental catastrophe is partly attributable to the way scientists and advocates negotiate the protracted temporality and future orientation of the problem.[2]

Tello specifically points out that public imaginings about eventual planetary catastrophe – at the hands of humans – are shaped by the presentation of information by figures of scientific authority throughout the world. Tello's point reflects some of the ways in which Antarctica is presented to the global population through a lens of scientific research and environmental concern. Such representations inherently alter the relationship that viewers and consumers of media have with Antarctica. In 1992, Paul Simpson-Housley explored the idea that perception is not always a simple response to stimuli; rather, it is a conglomeration of preconceived and anticipatory thoughts on a subject.[3] Our perception of the world is not a reaction to simple stimuli, but rather, as Tello pointed out over a decade later, deeply and inherently shaped by external sources. Perceptions of Antarctica are shaped directly through the ways it is presented from a wide range of sources. Timothy J. Lukes has explored the effects of art on viewers, and speculates that perhaps the role of art is to aid in the clarification of alternative narratives, and in the process of disrupting the status quo.[4] Lukes' thoughts here identify the role that many

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[1] Veronica Tello, 'The Fiction of Aftermath: Public Art, Public Imagination and the Aesthetics of Anthropogenic Crisis', *Australian Humanities Review,* No. 60, November 2016, page unknown.
[2] Ibid.
[3] Paul Simpson-Housley, *Antarctica, exploration, perception and metaphor,* London: Routledge, 1992, p. XV.
[4] Timothy J. Lukes, "Political Effects of Art on Audience", *International Political Science Review,* Vol. 12, No.1, 1991, p. 69.

contemporary artists attempt to undertake: to provide alternative ways of 'seeing' which critique traditional methods of 'looking'. Particularly in a context where visiting Antarctica is highly unlikely for most people, the popular imagination of the place is shaped by scientists, national agencies and news media channels. The role of artists in this reshaping of public imagination can then include offering alternative voices in the conversation.

Figure 2.1: Anna McKee, WAIS Reliquary: 68,000 Years of Ice, installed at Nevada Museum of Art

McKee's aforementioned project, *WAIS Reliquary: 68,000 Years of Ice,* highlights the opportunities of artistic interpretation to offer immersive and emotive representations of scientific data, encouraging engagement and criticality. McKee has explained that *WAIS Reliquary* was a direct response to the West Antarctic Ice Sheet Divide Ice Core project. In January of 2012, after a decade of preparation, the West Antarctic Ice Sheet (WAIS) was drilled to a depth of 3,405 metres. Not only is this the deepest and most detailed ice core drilling ever completed, but it has drastically changed the way that the scientific community considers the global climate record. McKee visited the WAIS research camp site in the summer season of

2009-2010, with the help of the USA National Science Foundation Antarctica Artists and Writers Program. During her time on the continent, the artist was deeply struck by the sheer scale that the ice core would represent: it would be a record of space and time never seen before.[5] Funded by the National Science Foundation, the WAIS drill retrieved 122-millimetre diameter cylinders of ice, each containing detailed information on environmental conditions at different points during the last 68,000 years. For McKee, part of the value of the project lay in thinking of the future: "the ice core record is helping scientists understand why climate can change abruptly and how climate may unfold in the coming century".[6]

"A silent and abstracted representation of 68,000 years of temperature", *WAIS Reliquary* interpreted data from the WAIS Divide Ice Core project into an aesthetically engaging display.[7] To develop the installation further, sound artist Steve Peters created a multi-channel soundscape of electronically processed sounds of the glass ampoules touching and moving.[8] The track is over thirty minutes long, the gentle tinkling of glass sounds icy, and there are watery and windy noises blowing in the background.[9] Alexander Supper has written specifically on the value of "sonification" of data. Supper explains that, when used in an artistic project, the sonification of traditionally scientific data "is often situated as an immersive and emotional medium".[10] Supper has stated that since the early 1990s, auditory equivalents of data visualisation have become increasingly popular in artistic practice "as a means of popularising science".[11] This process of sonification, as utilised in McKee's installation, offers further opportunities for engagement between art and science. Supper explores artistic interpretation as a response to the "crisis in the relationship between the sciences and their publics."[12] The author implies that while sciences may struggle to connect with some audiences, artistic representation can offer alternative channels of engagement. Though Supper speaks on the

[5] Anna McKee, 'WAIS Reliquary: 68,000 Years of Ice', *Anna McKee,* https://annamckee.com/gallery/wais-reliquary-68000-years/, accessed 11/08/2018.
[6] Author Unknown, 'West Antarctic Ice Sheet Divide Ice Core', http://www.waisdivide.unh.edu/, accessed 11/08/2018.
[7] Anna McKee, 'WAIS Reliquary: 68,000 Years of Ice'.
[8] Ibid.
[9] Peters' sound scape can be found on McKee's website. Anna McKee, 'WAIS Reliquary: 68,000 Years of Ice', *Anna McKee,* https://annamckee.com/gallery/wais-reliquary-68000-years/, accessed 11/08/2018.
[10] Alexandra Supper, 'Sublime frequencies: The construction of sublime listening experiences in the sonification of scientific data', *Social Studies of Science,* Vol. 44, No. 1, 2014, p. 34.
[11] Ibid.
[12] Ibid.

process of auditory development, the sentiment remains: artistic representation of data can offer alternative modes of communication which can broaden the reach of scientific information, shape our imaginations and encourage engagement with our surroundings. McKee has crafted a multi-sensory environment which reflects on Antarctic and global environments, directly converses with scientific data, and hopes to shape deeper imagination and thought about Antarctica.

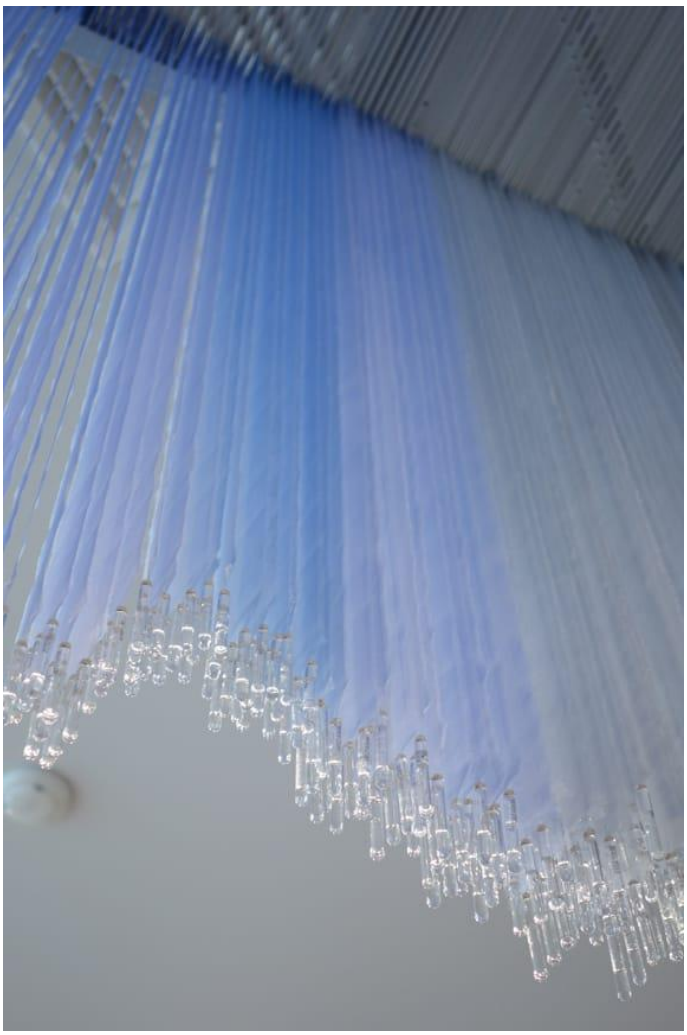

Figure 2.2: Anna McKee, WAIS Reliquary: 68,000 Years of Ice, installed at Nevada Museum of Art (detail).

By merging the lines between science and art and presenting the extremely complex WAIS Divide Ice Core project in a tangible, aestheticised way, McKee has been able to introduce new information to her audiences. Despite these intentions, however, it is important to consider the reach of McKee's work: the impact that this installation has had is reliant upon the number

of people it reached and the degree to which audiences were affected. The NMA's annual report from 2016 – which covers McKee's exhibition – does not include their visitor numbers, but does outline that the media interest in the museum over this year was relatively high.[13] The NMA is not a small institution, and McKee's exhibition was no doubt highly visible throughout its almost five month run.[14] The installation arrangement of *WAIS Reliquary* was deeply moving: viewers of the work are intimately close to water that was once ice buried over three kilometres below the surface of Antarctica. Many of the exhibition's viewers will never visit Antarctica, yet to be so close to something that had been so distant creates a connection to the place that some might never have felt without this project. *WAIS Reliquary* suggests the immense value and impact that the intersections between art and science can have. These collaborations invite the artists' audiences in to engage with material they might not otherwise experience or even understand. McKee's immersive project helps the audience to shape their imagination of Antarctica through a perhaps unexpected personal connection to place.

At a forum of the Sydney Environment Institute in 2018, William L. Fox commented that contemporary artists are able to employ empathy and notions of time and place that go beyond conventional scientific knowledge.[15] Fox further underscored the abilities of artists to highlight their personal connections to issues, explaining that the possibilities of contemporary art are increasingly appealing to conservation and environmental agencies that are attempting to broaden their own scope. The inclusion of contemporary arts in discussions of climate and environmental concern represents a trend of institutional agencies engaging with contemporary artists in the hopes of creative problem solving and increased communication.[16] Fox highlighted the value of diversity in opinion about, and representation of these issues. Though these conversations are limited to the artist's audience, contemporary artists such as

[13] The Nevada Museum of Art also ran the installation *Seven Magic Mountains* by Swiss artist Ugo Rondinone which was internationally noted. It is important to consider that this installation inspired a large boost in visitor numbers and social media engagement with the institution. This institution was not within the walls of the gallery so may not have impacted the audience who saw McKee's installation.
[14] Author Unknown, Nevada Museum of Art Annual Report 2016, https://www.nevadaart.org/wp-content/uploads/2018/11/NevadaMuseumOfArt_AnnualReport_2016.pdf, accessed 15/01/2019.
[15] William L. Fox, 'Artists Have Never Been More Important', *Sydney Ideas Forum*, Sydney Environment Institute, The University of Sydney, Australia, 27 March 2018, available online at https://soundcloud.com/sydneyenvironmentinstitute/artists-have-never-been-more-important, accessed 11/10/2018.
[16] Ibid.

Xavier Cortada offer a diversity of perspectives to the climate conversation that can, in turn, shape popular imagination and understanding. Cortada uses his own perception of climate issues, access to resources and indeed his personal values to present information to his audiences, projecting a narrative of environmental threat to invoke an emotional response in the viewer.

Figure 2.3: Xavier Cortada, astrid, Ice Paintings: Antarctic Sea Ice Series, Medium: Sea ice from the Antarctica's Ross Sea, sediment from Antarctica's Dry Valleys and mixed media on paper, 12 inches x 9 inches, 2007.

Cortada was invited to participate in the 2006-2007 National Science Foundation Antarctic Artists and Writers Fellowship (USA). During this fellowship, Cortada received samples of ice and sediment from scientists studying the effects of climate change in Antarctica, from which he created a series of prints titled 'Ice Paintings'. These ice paintings reflect Cortada's own anxieties about the future of the world, and he has stated that the ice he used in these paintings is the very same ice that threatens his home city of Miami in the near future. Given

that the melting ice of the Antarctic continent threatens low lying coastlines, Cortada wished to engage these at-risk communities in order to spark conversation about the future of life in coastal regions. Cortada originally trained as a lawyer and has promoted climate change awareness in a range of communities using various modes of engagement. The artist has explained that his art practice stemmed from finding ways to communicate ideas and is a means of "a way of amplifying people's voices."[17] His artworks are statements that serve to draw attention to the personal aspects of the highly scientific and globalised threat of environmental disruption.

Works such as *astrid* (2007) are inherently reliant upon and reflective of the resources provided to Cortada through scientific research, and yet they become an abstracted product of his own interpretations of the very foundations of Antarctica. Fox references the fact that institutions are increasingly turning to contemporary arts contributions to the discussion of the value of artists working in Antarctica, underscoring the alternative perspectives that artistic exploration can bring to environmental concerns. Many organisations that send artists to Antarctica are embracing the values that Fox outlined: for instance, Antarctica New Zealand explains that its programme plays a critical role in "informing and influencing the public's understanding towards the science and operations" in the region.[18] Ideas and imagery produced in relation to the continent play key roles in the 'sale' of Antarctica to a range of audiences. Institutional programmes such as that experienced by Cortada are key to the political and representational economy that underpins contemporary understandings of Antarctica. As Fox outlined, artists like Cortada are able to open discussions, provoke thought and pose questions about the representations and contemporary conditions of Antarctica. In praising the potential of art in this context, it is also important to acknowledge the relationships between institutional bodies and artists, and the degrees to which artistic efforts might be mediated or dictated by supporting organisations. Juan Francisco Salazar has identified that works produced through these channels are often encouraged to be "pictorial, representational and conventional", documenting the environment and assisting in a positive

[17] Xavier Cortada quoted in Lori Capullo, 'Artist Xavier Cortada's Newest Work is a Statement on Sea Level Rise', *Indulge,* Nov. 22 2018, https://www.miamiindulge.com/miami-leaders/artist-xavier-cortadas-newest-work-is-a-statement-on-sea-level-rise-5562/, accessed 15/01/2019.
[18] Author Unknown, Antarctica New Zealand, 'Community Engagement Programme', http://www.antarcticanz.govt.nz/education/communityengagementprogramme/, accessed 7/09/2018.

representation of scientific inquiry in the region.[19] It is essential to remember that though artists are granted access to the region, such exposure is almost entirely reliant on the funding of organisations that have vested interests in the success of their cause; for instance the continual stream of funding and support in research ventures. Artists must therefore walk the line between retaining organisational support for themselves and pushing the boundaries of production to create projects that are able to critique management and infrastructure surrounding Antarctica, and simultaneously progress their own artistic practice. This is not to say that institutional support prevents creativity in representation; rather, it is to flag the power relations in the region which influence and mediate the imagery conceived there.

Alan C. Braddock and Renee Ater have written that Cortada is an artist of "unambiguously…environmentalist belief", and that his prints created during his Antarctic residency – such as *astrid* – encompass his "eco-cultural sensibility".[20] Cortada's abstracted composition is enlivened by the realisation of the origins of the materials employed by the artist: the ice and sediment printed onto the paper draw a direct association with global warming and polar ice melt. Issues such as these permeate contemporary understandings of our world, and global warming is something that can no longer be ignored; as Eric Rignot has stated, the melting of the West Antarctic Ice Sheet has "passed the point of no return".[21] Just as is the case for the work of other artists discussed in this chapter, Cortada's work relies upon the artist's empathy and depicts Antarctica beyond the basis of scientific representations. Fox outlined that it is precisely this personal perspective that offers immense value in opening dialogues regarding the state of Antarctica and our wider world. Braddock and Ater suggest that while these themes of global climate devastation appear to be a lot for a small painting to address, *astrid* is able to do so at many levels.[22] In creating this "beautiful and serene" work, which is linked to Antarctica on a physical level, Cortada uses his artistic practice to communicate concerns and threats in ways that appeal to viewers on aesthetic and emotional

[19] Juan Francisco Salazar, 'Mediating Antarctica in digital culture: politics of representation and visualisation in art and science.' Dodds, Hemmings and Roberts, *Handbook on the Politics of Antarctica,* Cheltenham: Edward Elgar Publishing, 2017, p. 132.
[20] Alan C. Braddock and Renee Ater, 'Art in the Anthropocene', *American Art,* Vol. 28, No. 3, 2014, published online https://www.journals.uchicago.edu/doi/abs/10.1086/679693?mobileUi=0&journalCode=amart, accessed 28/01/2018, p. 2.
[21] Justin Gillis and Kenneth Chang, 'Scientists Warn of Rising Oceans from Polar Melt', New York Times, 12/05/2014, page unknown.
[22] Braddock and Ater, 'Art in the Anthropocene', p. 3.

levels. The initial appeal of the work then leads to a deeper engagement with its underlying themes. Cortada explains how

> The work, beautiful and serene, would be a precursor of horrors to come…I melted the ice on paper to create the works, adding paint and sediment. The works were made in Antarctica, about Antarctica, using Antarctica as the medium (provided to me by the very researchers who inform us about Antarctica).[23]

Cortada's explanation of the work highlights the ways in which artistic interpretation of contemporary issues can act as an introduction to themes, and an instigator of critique, rather than as a set of specified solutions. This increasingly valuable approach has become a keystone for many artists engaging in environmental or ecologically-focused art – especially in an Antarctic context which is already heavily science-focused as well as being remote. Cortada further identifies the important contribution of researchers in the production of *astrid* through their provision of materials and samples that the work could not have been made without. It is the collaboration between these spheres of work that has produced these works which, in turn diversify representations of Antarctica.

Chris Drury's *Albatross 2 2008* explores the ways in which artists can interpret scientific data using an aesthetic or visual medium. Chris Drury was the artist in residence with the British Antarctic Survey from December 2006 to February 2007. While based on the Antarctic Peninsula, Drury created a number of site-specific works, after his return to the United Kingdom produced a series of works based on data from scientists he had spent time with there.[24] Drury explains that throughout his journey to Antarctica aboard the James Clark Ross, albatrosses were seen flying around the ship. Interested in their behaviour, Drury asked a scientist aboard the ship if they could provide wind and pressure charts of the region, along with a detailed satellite image for each day that Drury would spend in Antarctica. Once these data sets were collected, Drury added the flight path around the continent of a tagged albatross, provided by a biologist based at the British Antarctic Survey in Cambridge.[25] Like

[23] (Xavier Cortada in email correspondence with authors June 3, 2014). Braddock and Ater, 'Art in the Anthropocene', p. 2.
[24] Chris Drury, 'Antarctica', http://chrisdrury.co.uk/category/mapping/antartica/, accessed 15/08/2018.
[25] Chris Drury, 'Albatross', http://chrisdrury.co.uk/albatross/, accessed 15/08/2018.

Cortada, Drury's work is inherently reliant on scientific information, and therefore also on the willing contribution of scientists to the process of artistic production. Each person that provided Drury with data allowed this work to take its final form, and therefore to spread this information to new audiences.

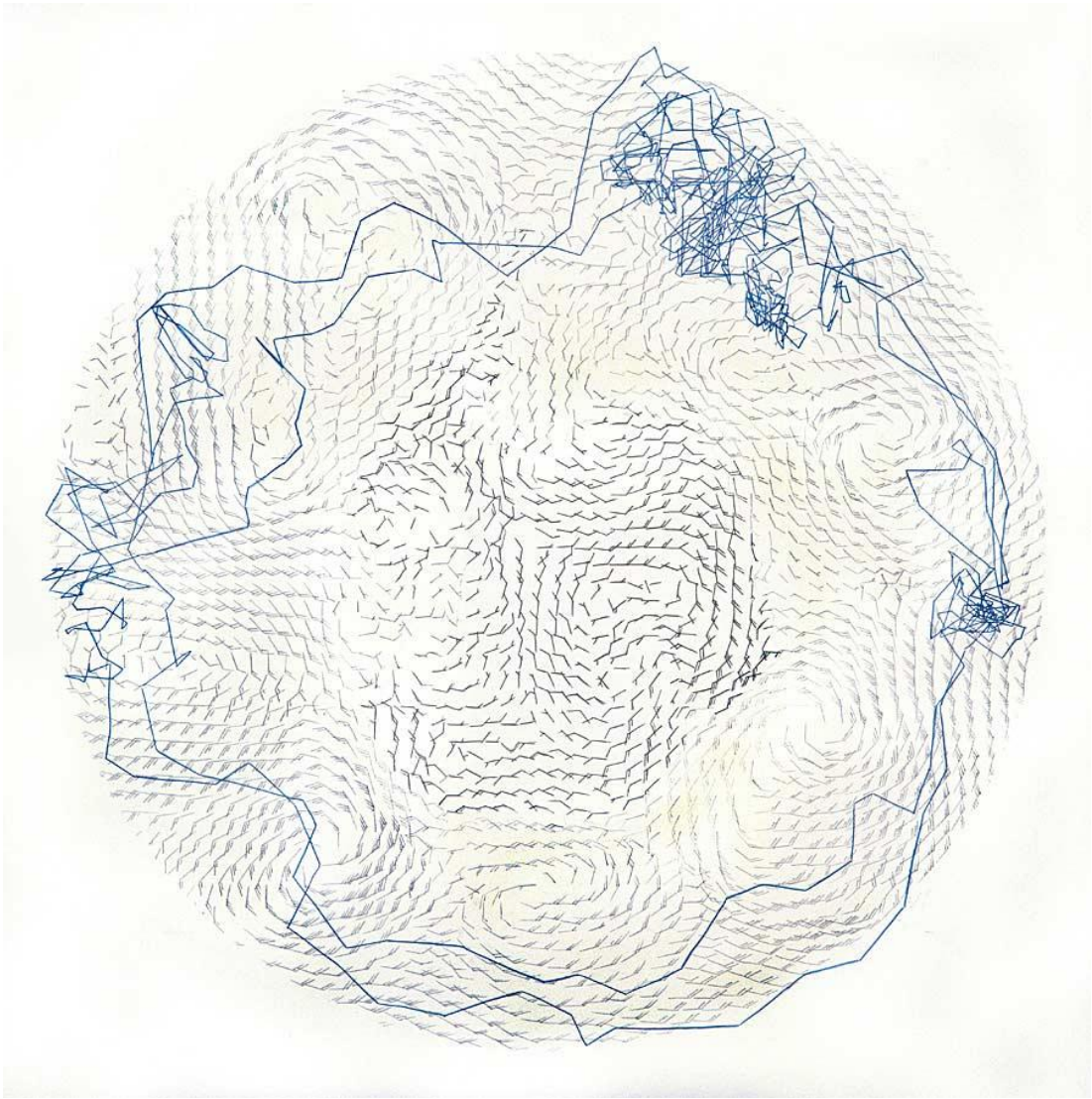

Figure 2.4: Chris Drury, Albatross 2 2008, 2008, crayon and pencil.

While Tello outlined the impact that both scientific and artistic representations of information can have on the cultural imagination around Antarctica, it is important to acknowledge that scientific information is not without its challenges. Drury's works are deeply connected to practices of making charts, maps and graphs, yet they simultaneously comment on the ways in which information is transferred through these processes. Writing on the "challenges with graph interpretation" in 2011, Nirit Glazer foregrounds discussions of complexity by

acknowledging that graph interpretation is affected by many factors, including content, structure and – importantly – the prior knowledge of the viewer.[26] Glazer points out that prior understandings of interpreting data, as well as any preconceived ideas about the subject, can bias interpretations and lead to misinterpretation.[27] By the author's reasoning, scientific data is not removed from issues of misinterpretation or biased readings of information: "despite the central role of graphs in scientific practice… there is evidence that interpreting graphs is not an easy task and acquiring graph interpretation skills is not transparent".[28] This acknowledgement of difficulties in graphing by the author problematises a key element of Drury's work; that the 'simple' interpretation of data is not always without bias, and that the communication of such data has significant power over imaginings of Antarctica. While Glazer's theories are based specifically on the issue of graph interpretation, it seems likely that other forms of data interpretation – such as of maps and charts - would face similar conflicts.

Alongside Glazer's interrogation of data interpretation, T. J. Demos has critiqued supposedly 'truthful' scientific representations of the world. Demos states that while imagery such as satellite documentation is often accepted as photography, it is really comprised of "a composite set of digitized files, the result of processed quantities of data collected by satellite-based sensors, much of it invisible to human perception".[29] These images are promoted as scientific data, but they have in fact been "carefully edited in order to show generally positive examples of modern development…interpreted for viewers insofar as they have been packaged as pictures".[30] Drury's own work behaves in a similar manner to the satellite imagery that Demos describes. Though the basis of the print is in scientific data, the overall image has been crafted in order to depict a certain narrative. Though critical of the ways data is presented, Drury does not aim to disregard completely the value of scientific data interpretation; rather, he seeks to flag to his audience that the charts, maps and graphs that so often represent the Antarctic environment are merely representations of information, and

[26] Nirit Glazer, 'Challenges with graph interpretation: a review of the literature', *Studies in Science Education,* 47:2, 2011, p. 183.
[27] Ibid.
[28] Ibid. p. 201.
[29] Demos, *Against the Anthropocene,* p. 14.
[30] Ibid. p. 15.

as such, are exposed to similar challenges of bias and personal perception as many other means of communication.

In demonstrating complex scientific information in a simple, graphic print, Drury draws attention to the visualisation and aestheticisation of information. Drury's work abstracts Antarctica and its surrounding Southern Sea. The shape of the Antarctic land mass is depicted through a subtle change in colour of mark making, and the albatross path overlaid on the pattern of wind and pressure markings. This print inspires its viewer to assess how we read scientific information and to critique the ways in which scientific information is shared with a global audience. As Glazer probed, to what extent are conventional scientific data sets readable by an average audience? What information can a person glean from scientific research if they have no previous background in such an area? Again, Simpson-Housley's theory is valid here: that our perceptions are more than a reaction; instead, a conglomeration and amalgamation of the information we are presented with. In this case, Drury's *Albatross 2 2008* comments on the ways in which Antarctica is so commonly presented as a base for science and little else. Drury highlights the practices of visualisation of data, encouraging his viewers to question the ways we see information, and how this might shape our imagination of place and environment.

Drury's work does not attempt to propose solutions to the reductiveness of some representations of Antarctica, and instead stimulates critical thought about our own processes of perception. Kayla Anderson states that artistic initiatives that stimulate critical thought, rather than those that propose or "simulate" action, have the potential to be most constructive and conducive to change.[31] Anderson also points out that the narratives and modes of presentation of varying mediums employed by contemporary artists "are incredibly important in how we recognise, address and respond to the Anthropocene."[32] Anderson's emphasis on the lens of representation that art practice presents serves to highlight the value that the arts can have in Antarctic representation. Drury's work exemplifies the ways that contemporary art interrogates our perception of Antarctica and its 'data', and yet, when assessing its relevance

[31] Kayla Anderson, 'Ethics, Ecology, and the Future: Art and Design Face the Anthropocene', *Leonardo,* vol. 48, no.4, 2015, p. 339.
[32] Ibid.

in terms of effect on the artist's audience, it is important to remain critical with regard to the outcomes. It is almost impossible to measure the 'success' of a work of art, but it is key to remain critical of the degree to which Drury's work will actually effect change. The impact of works such as *Albatross 2 2008* is dependent on the artist's audience, the context of display of a work, and a range of other constantly changing variables. Despite good intentions, it can not be immediately assumed that any artwork has had the ability to inspire critical thought in every audience member.

Artistic interpretation of scientific information embodies a connection between spheres of knowledge, drawing attention to the wider "mesh" that Timothy Morton refers to in his text *The Ecological Thought*. [33] Morton explains that ecological thought does not solely regard the "sciences of ecology", but is instead an all-encompassing process of understanding. This theory of the "mesh" outlines a notion of the connectedness of all things, and underscores how all things are not isolated from one another but are inherently linked:

> the mesh of interconnected things is vast, perhaps immeasurably so. Each entity in the mesh looks strange. Nothing exists all by itself, and so nothing is fully 'itself'.[34]

Morton's 2010 theories can be read in furtherance of ideas such as those proposed by Jonathan Benthall in his 1972 text *Science and Technology in Art Today*. Just as Morton emphasises the value of ecological thinking and characterises it as a mesh, rather than existing in spheres of knowledge, Benthall called for a more comprehensive understanding of human experience. He argued that the fragmentation and "specialisation" of art and science should be corrected though interdisciplinary enquiry and criticality of thought.[35] Benthall appears to have propagated a precursor to the ecological thought which brought into question the "alleged objectivity and neutrality of science."[36] Despite the almost four-decade separation between the two authors' works, both Benthall and Morton identified that an expansive, ecological approach to how the world is considered offers comprehensive understanding, or at the very least an alternative perspective.

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[33] Morton, *The Ecological Thought,* p. 15.
[34] Ibid.
[35] Jonathan Benthall, *Science and Technology in Art Today,* London: Thames and Hudson, 1972, p. 11.
[36] Ibid. p. 13.

Figure 2.5: Gabby O'Connor, Studio Antarctica, installation shot, Pataka Art Museum, Porirua, New Zealand, 19 June-18 September 2016

These constructed 'spheres' of artistic and scientific knowledge are broken down by artist Gabby O'Connor, whose practice exemplifies the contemporary blurring of divisions between art and science. O'Connor has worked extensively with the National Institute of Water and Atmosphere (NIWA) scientist Dr. Craig Stevens and the K131 Antarctic-science research team and is now referred to by NIWA as an "interdisciplinary researcher".[37] Since meeting in 2011, she and Stevens have collaborated on research and artworks, as well as workshops and outreach programmes. O'Connor's role in Antarctic research shifted significantly in 2015 when the K131 team received funding to research the sea-ice platelet crystals of the Southern Ocean, Stevens called on her artistic practice to document and communicate the research. Set up with a studio in McMurdo Sound from which to produce her documentation, O'Connor became directly involved with the research of sea-ice platelets float that against the underside of

[37] Sarah Lang, 'Sea Change: From artist to Antarctic researcher', *North & South,* Published online via *Noted,* 2/04/2017, https://www.noted.co.nz/life/life-in-nz/sea-change-from-artist-to-antarctic-researcher/, accessed 17/08/2018.

existing sea ice. These miniscule crystalline structures can provide researchers with a lot of information about the climate and ocean ecosystems in the region. In an era of drastic environmental change, these platelets offer detailed insights into alterations in sea temperatures and air temperatures, and the impact that these changes have on the ecosystems of the Southern Ocean. This information also allows researchers to understand the patterns of environmental change in the Antarctic region, and the impacts that these patterns could have on the rest of the world. Having previously worked with Antarctic subject matter from a distance; O'Connor was "ridiculously excited" to work directly with Antarctic researchers and bring her interest in art and science even closer together.[38]

Sarah Lang explains that this collaboration between the NIWA team and O'Connor was incredibly beneficial to both parties:

> From [Stevens'] perspective, [O'Connor's] art helps people visualise the intricacies and implications of his research. From her perspective, he translates the science that informs her installation art.[39]

Indeed, Stevens acknowledged that though his research is extremely valuable in understanding the world, an artistic perspective can aid in engagement with data and information. The collaboration between Stevens and O'Connor embodies the way that Morton and Benthall approached thinking about the world: the interconnectedness of all things allows for comprehensive education and imagination. This project has inspired O'Connor to plan further research into the intersections between art, science and education. She has explained that each of these spheres "can stand alone…but together they have that much more power."[40]

Studio Antarctica of 2016 is a multimedia project that reflects the research on ice platelets that O'Connor and K131 completed during their trip to Antarctica. For it, O'Connor brought together photographic records of the research trip, as well as film, paintings and drawings and a site-specific installation. Each format of representation offers a new way of seeing the

[38] Ibid.
[39] Ibid.
[40] Ibid.

platelets: for example, up close and detailed in the photographs; abstracted and warped in the film work and paintings; and immersive and expansive in the sculptural piece that floated dramatically in the centre of the space. The large sculptural installation of 'platelets' was particularly complex and was made up of thousands of small pieces of packaging tape hand crafted to mimic the icy crystals. O'Connor enlisted the help of school children to create these replicas, and explained that this was not so much about the physical production of the work, but was instead more a tool to communicate Antarctica and the research into it to young people.[41] O'Connor appears to have strived to create an installation which offered as many points of access to scientific information as possible. In interpreting the NIWA K131 research in an artistic format, the information is able to contribute to a shaping of public imagination of the realities of climate change in Antarctica and the world's oceans.

Figure 2.6: Gabby O'Connor, Studio Antarctica, installation shot, Pataka Art Museum, Porirua, New Zealand, 19 June-18 September 2016

[41] Gabby O'Connor in conversation, 'Studio Antarctica', *Standing Room Only,* Radio New Zealand 5/6/2016, accessed online 17/08/2018, https://www.radionz.co.nz/national/programmes/standing-room-only/audio/201803392/studio-antarctica.

Each of the artists discussed in this chapter has embraced their positions as an ecologically-minded practitioner. Their perspectives and personal values have inspired connections between art and science which provide – and at times interrogate – the construction of places like Antarctica in the public imagination. These artists' contemporary visual representations of Antarctica play a role in the process of distributing and manufacturing Antarctica that, Fox, Simpson-Housley and others describe. Anna McKee, Xavier Cortada, Chris Drury and Gabby O'Connor each approach Antarctic subject matters in ways which encouraged the viewer to consider not only the continent itself, but also the ways that we see and understand it. This value of art in providing alternative representations is summarised by Morton:

> Studying art provides a platform, because the environment is partly a matter of perception. Art forms have something to tell us about the environment, because they can make us question reality.[42]

Furthermore, the inescapability for the rest of the world of the environmental concerns facing Antarctica is central in each of these artists' practice. For the survival of human life, scientific efforts in the region hope to capture information in order to understand – and ultimately alter – the course of climate change, and artists such as McKee, Cortada, Drury and O'Connor attempt to aid in the communication of this information, as well as to inspire empathy, engagement and change. Though the reach of these projects is limited the adaptation of scientific data and research into aesthetically pleasing, readable and engaging art projects can encourage engagement with climate issues among audiences. As these projects show, interest in Antarctica necessarily involves interest in the climate issues that face the planet. McKee, Cortada, Drury and O'Connor inherently discuss issues facing the world through their interrogation of Antarctic representation.

[42] Morton, *The Ecological Thought,* p. 8.

CHAPTER 3
Visiting Antarctica: Representations in Tourism

> Captain James Cook, who in December 1774 glimpsed Antarctica's outer palisades, thought that because of the extremities of ice and weather no one would ever venture further south. Now there is a permanent base at the South Pole. Now there is a *Lonely Planet* guide.[1]

Figure 3.1: Tourists aboard the Poseidon M/V Sea Spirit, during an 'Antarctic Awakening' expedition.

Timothy Morton explored the construction of 'Nature' in his text *The Ecological Thought* (2010). He described 'Nature' as an idealised and romanticised representation of environment, arguing that the idea of Nature is more often than not, self-contained and impossible to touch. A construction which serves to remind us of a different time, both "alien and alienated" from our contemporary condition.[2] As he explains, particularly in its eighteenth-century formulations, the construction of Nature would remind viewers of a time before modernity;

[1] Bill Manhire, *The Wide White Page,* Wellington: Victoria University Press, 2004, p. 9.
[2] Morton, *The Ecological Thought*, p. 5.

suggesting a flawless image of our environment, untouched by climate change and environmental disaster.

> Nature was a special kind of private property, without an owner, exhibited in a specially constructed art gallery. The gallery was Nature itself, revealed through visual technology in the eighteenth century as "picturesque" – looking like a picture…Nature isn't what it claims to be.[3]

In this sense, Nature can be understood as separate and removed from the rest of the world rather than as an integrated part of ecology and environment, isolated and exoticised: a construct also used in selling Antarctica as a tourist destination. Antarctic tourism company Poseidon Expeditions, for example, markets a cruise entitled "Antarctic Awakening". The voyage promises an early-summer experience of Antarctica as an "unspoiled polar wilderness,"[4] offering participants a chance to "travel to the last explored continent."[5] Similarly, Eclipse Travel offers an "Antarctic Discovery" tour: a twelve day expedition that provides travellers opportunities to "experience some of the most dramatic landscapes", or to "discover a number of rarely visited places."[6] These two examples alone offer an insight into some of the ways that Antarctica is packaged as a Natural construct and sold to global audiences; employing words which craft a specific narrative of exclusivity and adventure. This emotive phrasing used by tourism companies – "awakening", "discovery", "dramatic", "unspoiled" – plays upon Heroic-age ideals; ostensibly offering their (typically affluent) target audience the opportunity to go where few have gone before, gaining exclusive access to an isolated, untouched Nature. The tourism industry, intentionally or not, participates in the problematic crafting of Nature, often misrepresenting the complexity and realities of Antarctica.

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[3] Ibid. p. 5-6.
[4] Author Unknown, 'Antarctic Awakening', *Poseidon Expeditions,* https://poseidonexpeditions.com/antarctica/falklands-south-georgia-antarctic-islands-antarctic-awakening/, accessed 3/9/2018.
[5] Author Unknown, 'Cruises to Antarctica', *Poseidon Expeditions,* https://poseidonexpeditions.com/antarctica/?roistat=google2_g_57666128052_288192935962_antarctic%20tourism&roistat_referrer=&roistat_pos=1t2&utm_campaign=antarctic-search&utm_source=GoogleAdwords&utm_medium=cpc&utm_term=antarctic%20tourism&utm_content=Search|Antarctica&from=&position=1t2&match=e&geo=1011065&device=c&gclid=EAIaIQobChMIrcHaqMad3QIVmgoqCh0DuADfEAAYAiAAEgKgzvD_BwE#dest-departures, accessed 3/9/2018.
[6] Author Unknown, 'Weddell Sea – Antarctic Discovery: Plancius', *Eclipse Travel,* https://eclipsetravel.co.nz/package/weddell-sea-antarctic-discovery-plancius/, accessed 3/9/2018.

Many contemporary artists engage with these commercial and capitalist representations, critiquing and engaging with the subject matter and interpreting their own experience of Antarctica to their viewers. Lisa E. Bloom has suggested that artists working in such a field are "contemplating new forms of critical awareness about climate change and the paradox of human belonging in Antarctica".[7] Taking Bloom's assertion as a starting point, this chapter will explore the ways that artists Adele Jackson, Anne Noble, Alexis Rockman and are engaging with, challenging and appropriating the construction of Antarctica through tourism imagery. In doing so, this chapter will demonstrate how the practices of these artists can expose some of the existing representational constructs commonly employed within the tourism industry and offer alternative frames of viewing the Antarctic continent. The artists discussed here are all explicitly aware of the conflicts and tensions of their positions: they speak against anthropogenic behaviour that is damaging the continent, but also participate in the cycle of human intervention into this space. Indeed, it is important to remember that artists, along with scientists, researchers and anyone 'living' in Antarctica are all temporary visitors: tourists.

Adele Jackson describes herself as an "environmental artist…interested in the relationships between people, places, culture and nature."[8] With a long-standing interest in Antarctica — like many, her first exposure to Antarctica was simply a photograph — Jackson has made multiple journeys to the region since 2013. After travelling as an expedition photographer on a tourist vessel, Jackson spent two summer seasons in Antarctica working for the UK Antarctic Heritage Trust.[9] Jackson has travelled to Antarctica through channels conventional tourism and institutional research voyages, seeing the range of impacts, benefits and concerns of travel to the region.[10] Armed with a both a strong sense of the value of Antarctic experiences and the dangers that this might pose for the ecosystem, Jackson created a series of works titled *Leave Only Footprints* (2015), in an attempt to communicate the tense dichotomy between access to and preservation of the Antarctic environment. This series displays marks made in the Antarctic

[7] Lisa E. Bloom, 'The Aesthetics of Disappearance: Climate Change, Antarctica and the Contemporary Sublime in the Work of Anne Noble, Connie Samaras and Judit Hersko', *ISEA 2011 Istanbul*, 2011, https://isea2011.sabanciuniv.edu/paper/aesthetics-disappearance-climate-change-antarctica-and-contemporary-sublime-work-anne-noble-co accessed 6/4/2018.
[8] Interview with the artist, Harriet Litten & Adele Jackson, 31/05/2019, Christchurch, New Zealand.
[9] Author Unknown, 'Looking South: Visual Art & Antarctica', Christchurch Art Gallery, https://christchurchartgallery.org.nz/events/looking-south-visual-art-and-antartica accessed 7/10/2019.
[10] Interview with the Artist, Harriet Litten & Adele Jackson.

surface by human movement, articulating the physical impact that humans have on their environments: the impact that can be made by just a few footprints. Jackson's photographs are simple and striking in their composition, capturing awesome Antarctic landscapes. Indeed, in making this series, Jackson is acutely aware of her own impact as an artist working in an extremely fragile and volatile environment, despite the broader ecologically political aims of her project.

Figure 3.2: Adele Jackson, Paradise Bay, February 2015.

In the popular imagination, Antarctica is inherently linked to and reliant upon the notion of 'ecotourism' due to its fundamentally limited access through the tourism industry. David Wearer has described ecotourism as a form of travel which focuses on destinations of environmental and natural interest. Ecotourism destinations, he notes, are overwhelmingly established in protected areas such as reserves, and are often in regions that are protected due to populations of "charismatic megaflora or megafauna."[11] Antarctica provides a prime case study for the operations of ecotourism: attracting tourists who are drawn to the

[11] David Wearer, *Ecotourism*, Queensland: John Wiley & Sons, 2008, p. 64.

spectacular landscape and wildlife populations.[12] John Dudovskiy has articulated some of the benefits of ecotourism to both the tourist and the environment. Firstly, Dudovskiy states that participating in ecotourist activities may provide a sense of fulfilment and contribute to the environmental cause; the additional education often gained through ecotourism ventures increases the value of environmental preservation and awareness of the tourist. Secondly, in some cases ecotourism is seen to "monitor, assess and manage the impacts of tourism".[13] For example, cruise ships in Antarctica do contribute to environmental disruption through the use of fossil fuels and waste production, but their presence in the region can simultaneously aid in monitoring changes in the region and educating passengers. Jackson agrees, highlighting that tourism ventures often have an educational element to them, sharing information about overfishing in the Antarctic Ocean for instance, or the personal changes individuals might make to reduce their carbon footprint and waste production once returned from their voyage.[14] In Dudovskiy's assessment of the benefits to tourists, it is clear that the value of ecotourist endeavours should not be ignored. Similar to the ways that art and science intersect in attempts to broaden engagement with scientific research in Antarctica, ecotourism can allow visitors to get close to Antarctica in ways that could otherwise be impossible. Jackson has articulated that she — and many more of the passengers aboard cruise vessels — could not have gained the deep appreciation that she has formed for Antarctica without being physically present in the place. Exposure to the weather, time and isolation of the place, for example, have deeply altered Jackson's relationship to Antarctica.[15] It is critical to note that travel to Antarctica is an extremely privileged experience, Jackson herself is acutely aware that there are social and economic factors at play which influence the demographic participating in Antarctic travel. Time, money, institutional support and even environmental concerns may prohibit someone from visiting Antarctica, and this must be considered when understanding 'audience' engagement with the place. Though not without its inherent complexities, ecotourism can encourage connection to place through personal experience in the environment. Without tourism, our perception of Antarctica would likely be immensely different to how we understand the place today.

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[12] Ibid. p. 255.
[13] John Dudovskiy, 'Ecotourism: benefits and value', *Research Methodology,* 10/02/2014, https://research-methodology.net/ecotourism-benefits-and-value/ accessed 21/11/2018.
[14] Interview with the Artist, Harriet Litten & Adele Jackson.
[15] Interview with the Artist, Harriet Litten & Adele Jackson.

Figure 3.3: Adele Jackson, Deception Island, November 2015.

Jackson herself is critical of the ecotourism label and is particularly concerned about Antarctica being labelled an ecotourism destination. She argues that a key feature of ecotourism should be a focus on the carbon footprint of travel and what the tourist can 'give back' to the environment they visit. If tourism organisations are able to make huge, institutional and structural changes then there may be potential, Jackson says, but it is important to be critical of the environmental footprint of travel: flying to a gateway city, taking a fossil-fuelled ship for the journey across the ocean, the cost of the waste, food and resources to support ship-loads of tourists. A viewer might question the origin of the footprints in Jackson's images, or how they got there with no further clues included in the frame. Jackson here highlights these

'hidden' impacts of travel. Those elements of a trip that often are not considered in the final 'footprint' of a journey. All of these elements add up to a cycle of travel which, oftentimes, does not support the environment from which it makes its profits. Jackson warns of greenwashing, seeking criticality through her works *Paradise Bay, February 2015* and *Deception Island, November 2015.*[16] These two photographs show footprints and tracks in the snowy surface of Antarctica. In both works, Jackson draws attention to the physical traces that humans leave on the places they travel to. *Deception Island* shows footprints through the surface snow, revealing the dirt and rock beneath. It appears as though the snow has worn thin, but also gives a sense of impurity, negating the 'untouched nature' myth that is often crafted about Antarctica. The footprints in this series highlight the impact of humans on the land and reject the notion that Antarctica can remain a perfect, isolated example of the natural world in the context of extensive anthropogenic contact. Both images, *Paradise Bay, February 2015* and *Deception Island, November 2015,* embrace a relatively conventional landscape composition. Presenting the land, sky and sea as majestic, impressive and awe-inspiring, these images reflect conventions of expedition photography of past centuries. Though instead of presenting the immaculate landscape, Jackson's images are disrupted with anthropogenic markings in the snow. Taking centre stage in the foreground of both images, these footprints quickly become the central focus of the work, speaking to the severity of human travel to the region amongst a fragile and vulnerable environment.

While ecotourism at its best might attempt to increase education and engagement, unfortunately, as Wearer has explained, it is also a term that can be misused by foregrounding ideas of adventure, wilderness and purity in nature, while overlooking the negative impacts that human intervention might have in these spaces. The narrative of ecotourism often relies upon a frontier myth, persisting in contemporary thought, presenting Antarctica as the "last explored continent"; something strange and exotic.[17] Yet, while Antarctica is narrativized as an unspoilt environment, it at the same time attracts relatively large numbers of visitors every year: in 2017 over 30,000 tourists visited Antarctica.[18] Jackson's *Leave Only Footprints* series

[16] Interview with the Artist, Harriet Litten & Adele Jackson.
[17] Author Unknown, "Cruises to Antarctica", *Poseidon Expeditions.*
[18] Juan Francisco Salazar, 'Mediating Antarctica in digital culture: politics of representation and visualization in art and science', p. 132.

articulates the impacts that these thousands of people leave behind in their hope of seeing the Antarctic ecosystem before it melts away.

The field of "dark tourism" has interesting implications on Antarctica in this era of massive global warming. As Rebecca Price has written, themes such as disaster, death, atrocity, and human suffering are regularly considered in the context of dark tourism, which might include activities such as supernatural experiences and visiting World War Two concentration camps.[19] In the case of Antarctica: seeing a natural environment under threat of massive disruption and destruction. Indeed, John Lennon and Malcolm Foley have argued that whether its content is real or fictional, the presentation of death — and similarly dark themes — has become a commodity for consumption.[20] There is nothing "off-limits", they suggest, about marketing and profiting from death and destruction. As Price has explained, dark tourism is typically associated with human suffering, yet the idea of viewing devastation provides interesting grounds from which to view contemporary tourism in Antarctica, where there has been accelerated ice melt and mass reduction of the West Antarctic Ice Sheet from fifty three billion tonnes per year in 1992 to an incomprehensible 157 billion tonnes per year in 2017.[21] Antarctic tourism now fits into a definition of dark tourism: a location which in many ways exemplifies disaster, atrocity and suffering (of nature, animals and even humans both directly and indirectly). While Price, and Lennon and Foley have outlined the definitions of dark tourism, Professor of tourism management Te-Yi Chang has discussed the possible benefits of participation in dark tourism experiences. In 2014, Chang argued that "Dark Tourism motivation could enhance the visitors' environmental attitudes towards Dark relics, and further affect the acquired benefits of experience." An emotional and psychological engagement with a "relic" can thus increase engagement with the subject; Chang argues that in fact, these findings provide useful resources for the planning and development of Dark Tourism activities.[22] Echoing Dudovskiy's reflections on the possible benefits of ecotourism,

[19] Rebecca Price, 'Dark Tourism A Guide to Resources', *Reference and User Services Quarterly,* vol. 57, Issue 2, 2017, p. 97.
[20] John Lennon and Malcolm Foley, *Dark Tourism,* London: Continuum, 2000, p. 5.
[21] IMBIE, data from abstract, 'Mass Balance of the Antarctic Ice Sheet from 1992 to 2017', *Nature,* Vol. 558, 2018, published online June 2018, https://www.nature.com/articles/s41586-018-0179-y#Abs1, accessed 3/9/2018, page unknown.
[22] Te-Yi Chang, 'Dark Tourism: The effects of motivation and environmental attitudes on the benefits of experience', *Revista Internacional de Sociologica,* Vol. 72, November 2014, page unknown.

Chang's argument relies on the degree to which visitors engage with the subject matter at hand. Jackson embraces the 'dark' emotional response of visiting Antarctica, while attempting to raise awareness of the ecological impacts of international travel, in the hopes of employing the benefits of limited travel with education.

Despite the associated concerns, Jackson asserts that it is important to take into account the high levels of affect and change that tourism to Antarctica can cause. She also highlights the far more severe impacts of scientific and research-based ventures: flights, buildings, waste impacts, runways. The physical footprint of national endeavours in Antarctica is huge and should not be overlooked. Instead, as her works encourage, Jackson identifies criticality of the information we receive and the imagery we take in as key. The footprints in her photographs, given this context, are put into perspective. It is not individual footprints which hurt the environment, but the thousands upon thousands of steps, flights and cruises which leave behind trails of destruction. While the artist is critical of individual human impact on the landscape, more concern should be shown to the cumulative effect of industry and national level endeavours in the region. Being as self-reflective as Jackson is, she is not exclusively critical of tourism in and of itself, but rather chooses to think holistically about her travel. By offsetting carbon through donations, considering her waste and consumption when she isn't in Antarctica, and ultimately, spreading information and discussion about environmental issues, Jackson sees the benefit not only in her own travel to the region, but in others visiting too. Jackson asks her audience to think more critically about their impact on the world, particularly on the places that are most fragile and at-risk in this unstable, uncertain era.

Anne Noble is equally engaged with her travel to Antarctica as an artist: particularly intrigued by interrogating representations of Antarctica in the tourism industry. Antarctic tourism has become the subject of a series of photographic works by Noble, including a book published in 2008, entitled *Iceblink*. Re-presenting individual images in comparison with others, the book explores contrasts and similarities between what can be described as representations and constructions of Antarctica. Visiting Christchurch, Auckland, Sydney, Hobart, Japan, Argentina and Scotland and, of course, Antarctica, Noble contrasts imagery of the constructed versions of, and the physical location of Antarctica, to interrogate the ways that the place is presented. Noble photographed dioramas of penguin models against painted backgrounds and landscapes

of Antarctic coasts; murals of Antarctic waters filled with ice and photographs taken from the back of a boat looking out to sea. The parallels that Noble draws through this body of work challenge distinctions between the 'real' and the 'constructed'. The viewer must decipher which images represent Antarctica in reality, and which are a constructed representation - a task that at times takes more interrogation than might be anticipated. The photographs make use of recognisable features of Antarctic scenes: penguins, ice and water. She draws attention to the signifiers that the viewer may use to identify Antarctica, interrogating the ways in which we perceive the continent, and indeed, what it is that makes the difference between 'real' and 'fake'. Typically, Noble's images give away their context through the subtle inclusion of a carpet floor framing the diorama, a person in regular clothing (without Antarctic-standard jackets, gloves, hats), a clearly painted surface or a wall text explaining what is on display.

Noble's chosen field of photography – decoding reality and fiction – can be extremely fraught territory. As Kate Flint has suggested in her article *Photographic Fictions*, "nonmelodramatic" photography such as Noble's *Iceblink* series is significant in foregrounding "how the bizarre can, through lighting and composition, be made to look very ordinary, and conversely, how the everyday can seem very peculiar indeed."[23] In exploring the juxtapositions between reality and fiction that are presented in such images, audiences become aware of the motifs and markers by which we recognise the Southern continent, and the forms of mediation through which we are exposed to this place. Kate Flint has explored the blurred boundaries between reality and fiction, stating that in many cases when looking at photographic images, "…one is unable to tell, with any certainty that reaches beyond one's prior knowledge of a photographer's work, whether one is looking at a scene that has been staged or one that appears to have been snatched at a fortuitous moment."[24]

[23] Kate Flint, 'Photographic Fictions', *NOVEL: A Forum on Fiction,* Vol. 42, No.3, Theories of the Novel Now, Part II, 2009, p. 396.
[24] Ibid.

Figure 3.4: Anne Noble, Wilhelmina Bay, Antarctica, 2005, pigment print on paper, 74.5x95cm

Wilhelmina Bay presents a snapshot, similar to something a tourist on a cruise ship might take. The photograph is split into halves, the upper section presents an Antarctic landscape, blue skies and icy water. The lower half of the image captures plastic chairs and tables on the deck of a ship, a scenic place for a meal, to take in the view from the safety of the ship. Tablecloths and water jugs show that the area is primed and ready for its guests. The inclusion of the lower half of the photograph seems accidental, seemingly replicating the framing (or mis-framing) of amateur, vernacular photography. Understood as a snapshot, the viewer might assume that the intention was to capture the landscape, while cropping out the reality of the moment. Noble, however, purposefully includes clues as to the real context, showing the viewer what goes on behind the camera of tourist snapshots and advertising campaigns. In fact, the similarities between *Wilhelmina Bay* and the advertising image for Poseidon M/V Sea Spirit at the outset of this chapter, share striking similarities.[25] Antarctic mountains, ocean and the deck

[25] See Figure 3.1

of a cruise ship occupy thirds of each photograph. Poseidon's inclusion of its passengers wearing commercially branded coats makes this a clear advertisement. Noble's image can be differentiated from this advertisement through its omission of people wearing branded clothing, yet, the portrayal of Antarctic scenery from the deck of a ship is near-identical. Noble's work, alternatively, draws on the tropes of this kind of advertising imagery to enact a subtle critique of Antarctic tourism and its implications for the environment. Given the widespread headlines regarding the catastrophic state of the region and the climate implications of tourism – particularly, in this case, the activities of cruise vessels – this series of works can be clearly located within an ecocritical discourse.

The drastic contrast between the two halves of this image suggests the collision of two very different worlds, the edge of the deck acting as a barrier that maintains a separation. The background could easily be a green-screen or a photographic mural; a construction rather than reality. Noble has taken the photograph from on board the ship, placing the viewer within the scene but separate from the landscape; able to view the environment but not have to participate within it. The human comforts of tablecloths and jugs, even dining tables and seats allude to a control and safety of being separated from the dangers of the ice. This safety enhances the distance between the two spaces. It becomes clear that the chairs and tables, tablecloths, even water jugs, are key to the narrative that Noble is presenting to us. In presenting these features of a tourist's experience, Noble addresses the feeling of power and control that humans often have over nature. While the image itself does not hold a strong sense of heroism or adventure, the photograph is most definitely underpinned by the sense that humans continue to have mastery over the landscape. The experience of nature is muted and sanitised through this distanced participation. Lisa E. Bloom describes how Noble "mocks the idea of a stage spectacle easily consumed by anyone who can afford a ticket", rather focusing on the ways that we can express a critical relationship with the uncritical consumption of "heroic", "sublime" Antarctica by tourists in artificial settings.[26] Noble complicates the perceptions of human encounters with Antarctica that are often sold to the world. Bloom has commented on the persisting cultural investment in heroic imagery and the sublime, stating

[26] Lisa E. Bloom, 'Antarctica: Feminist art practices and disappearing polar landscapes in the age of the Anthropocene', Dodds, Hemmings and Roberts, *Handbook on the Politics of Antarctica,* Cheltenham: Edward Elgar Publishing, 2017, p. 93.

that this emphasis on outdated representations has formed a "kitsch aesthetic of sublime wilderness now produced in indoor settings such as the Antarctic Centre."[27] Indeed, Bloom critiques the persisting tropes of heroic Antarctic representations, highlighting the misleading impact that such narratives can have. A primary channel of contact with Antarctic subject matter is, for many people, Antarctic experience centres. The perceptions that many people form of Antarctica are based upon the "kitsch aesthetic" of these centres, rather than the complex realities of the place.

Noble's focus on anthropogenic interventions into nature — and the re/creation of 'Nature' — highlight the fact that our very presence in the 'real' Antarctica threatens its existence, but it doesn't get any better if we leave since tourism and human existence in Antarctica is now a given. As Juan Francisco Salazar has concluded, although the notion of an 'untouched' Antarctica persists, it is nonetheless a myth.[28] What is being sold through this myth is the promise of 'Nature' — an 'imagined Antarctica' — untouched by climate change and human intervention. A fantastic combination of images and languages trying to meet the standards set in public imagination.[29] Noble's photograph asks us to look anew at this region and challenge the entrenched narratives in which Antarctica is represented as distant, vast, pristine and untouched. In doing so, *Wilhelmina Bay* calls attention to the disjunctions in our understandings of Antarctica as both untouched and threatened. Noble asks the viewer to reconsider their perceptions of Antarctica and to interrogate the sources from which perceptions form.

Just as Noble critiques the processes of tourism in Antarctica, Alexis Rockman's work attempts to reconcile — or at least engage with the issues attached to — his role as an artist-tourist. Rockman identifies his own role within this industry of ecotourism, highlighting the ways that his physical connection to place both make his work possible and simultaneously have their own impacts of the environment he attempts to present. Acutely aware of his human impact

[27] Ibid. p. 92.
[28] Salazar, Mediating Antarctica in digital culture: politics of representation and visualization in art and science', p. 132.
[29] Hanne Nielsen, 'Selling the South: Commercialisation and marketing of Antarctica', Dodds, Hemmings, Roberts, *Handbook on the Politics of Antarctica,* Cheltenham: Edward Elgar Publishing, 2017, p. 188.

on the environment, Rockman travels to a wide range of remote locations in order to paint a variety of environments with anthropogenic activity. Inspired by the implications of his practice, and the representations of Antarctica that had been presented in the sphere of tourism, the artist made a trip to Antarctica in 2007. This voyage inspired Rockman to record the fragile landscape that was visible to him from the cruise ship he boarded. His resulting *South* series depicts icy seascapes, punctuated by shipwrecks that signify the traces of human intervention into the region. In this series, Rockman embraces the notion that nature could reclaim its position of dominance on the Earth, reducing humanity from positions of power to minute and insignificant actors in a wider ecosystem. The artist acknowledges the 'intrusion' of tourism in the region, critiquing the impact that this industry has, while also acknowledging his own role in this cycle.

Untitled (Antarctica 1) depicts a cruise ship doomed to wreckage. The ocean is calm and the sky clear while the large cruise vessel lists in the water and four small lifeboats seek refuge from the danger. The reason for the listing of the ship remains unclear, however. In an interview with *Bomb Magazine*, Rockman explained that on his cruise through Antarctic waters, the ship he was aboard had to go off course to the aid of another cruise ship that had hit ice and begun to take on water. The passengers had been evacuated to lifeboats and awaited the arrival of another cruise-liner.[30] The drama unfolding in *Untitled (Antarctica 1)* directly reflects this event in Rockman's own journey; a dire case of nature exacting its power and strength over the human-made. While Rockman's own experience of Antarctica is mediated through a lens of ecotourism, it is clear that the artist holds a sceptical view of the practice at large. His focus on the "downfall of the cruise" in *Untitled (Antarctica 1)* aims to critique rather than to celebrate. It is difficult to reconcile both critiquing the practice of tourism in Antarctica and the willingness to participate in such systems. Rockman's desire to visit Antarctica himself reflects the arguments of Dudovskiy and Chang; that the emotional engagement and physical experience of a place is more likely to evoke a response in a person to a point of action than viewing a photograph or watching a film. In this case, Rockman's

[30] Dorothy Spears, 'The Art of Travel: Alexis Rockman interviewed by Dorothy Spears', *Bomb Magazine,* 30/07/2018, https://bombmagazine.org/articles/the-art-of-travel-alexis-rockman-interviewed/ accessed 21/08/2018.

participation in the cycles of ecotourism was necessary for the creation of this work. It is the artist's acknowledgement of the risks and impacts involved through a work such as *Untitled (Antarctica 1)* which provide a context of understanding and critical awareness.

Figure 3.5: Alexis Rockman, Untitled (Antarctica 1), 2008, watercolour on paper, 13.75x17.75inches.

The most common and by far most established mode of tourism in Antarctica is ship-based voyaging. Beginning in the 1950s and becoming well established in the 1960s by tourist organisation 'Lindblad Expeditions', ship-borne visitors account for the overwhelming majority of Antarctic visitors.[31] The International Association for Antarctic Tour Operators (IAATO) was established to monitor and govern the environmental impacts of tourist endeavours in the region. Due to Antarctica's peaceful coexistence structure under the ATS, the IAATO was formed in the absence of national regulatory authorities who would normally monitor environmental law compliance.[32] Despite the fact that private yacht voyages to Antarctica

[31] Wearer, *Ecotourism*, p. 257.
[32] Ibid. p. 258.

(estimated at approximately one hundred per year) are technically unmonitored, the IAATO remains the significant monitoring body in the area. This organisation is yet another example of a governance system in Antarctica, despite the ways that it is so often presented as external to the majority of nationalised and global political structures. The IAATO offers tourists an assurance that their voyage is in line with environmental concerns of the region – despite Wearer's warnings of the ongoing 'greenwashed' marketing and advertising of ecotourism. As Rockman's practice highlights, any human intervention into the Antarctic region – 'eco' or otherwise - is not without consequences. Wearer has highlighted that despite best efforts to minimise ecological impacts, it is very common for ecotourism organisations to take an elemental approach to their ventures, yet still present themselves to their audience as environmentally friendly. This implies a focus on individual aspects of the ecosystem, rather than an understanding and consideration for all elements of the regional ecosystem.[33] Rockman's *Untitled (Antarctica 1)* underscores the notion that despite the quest for knowledge and consideration of our environment, the very nature of ecotourism as an anthropogenic venture implies environmental impacts. As *Untitled (Antarctica 1)* depicts, the interventions of ecotourism are particularly visible when something goes wrong: a cruise ship resigned to a place on the ocean floor, debris in the water and ongoing effects to the ecosystem. Both reliant upon and critical of ecotourism, Rockman asks his viewers to question how we understand our relationship to the environment; our impact is always more complex than it seems.

Acting almost as a continuation of the narrative of *Untitled (Antarctica 1), Untitled (Antarctica 6)* offers some perspective of time and history of anthropogenic activity in the Antarctic region. This vessel abandoned and slowly becoming absorbed by the Southern Ocean signifies the passing of decades, indeed, centuries of human determination to exist within the Antarctic environment, and the end that humanity's persistence could face. The power of nature to overcome in one form or another, breaking down the remnants of human intervention – while this ship sinks into the ocean, penguins and seals continue on. Rockman's narrative here has progressed from his own involvement in ecotourism ventures to a wide-scoped view on the legacy this leaves behind. This continuation shows Rockman's own criticality of the processes of ecotourism and human impact on the world more broadly. The *South* series underscores

[33] Ibid. p. 10.

the artist's determination to use his privilege – after all it is privilege which gives access to Antarctica – to share his concerns and criticisms in a constructive and emotive way with his audience.

Figure 3.6: Alexis Rockman, Untitled (Antarctica 6), 2008, watercolour on paper, 13.75x17.75inches

Adele Jackson, Anne Noble and Alexis Rockman have each worked to challenge conventional representations of Antarctica in the tourism industry. These artists' projects negotiate the construction of 'Nature', so frequently used in the field of tourism. Jackson uses her photographic series *Leave Only Footprints* to critique not only the Antarctic tourism industry, but her own role in travel to the region. Jackson uses footprints in the surface of Antarctica to highlight the impact that visitors leave behind, while critiquing the notion that Antarctica will remain isolated and untouched by travel. The artist asks her viewers to think holistically about the benefits and downfalls of travel: assessing our place in the world on a more ecological level. Noble chose to highlight the ways that Antarctic tourism is framed, in contrast to reality of the place through works such as *Wilhelmina Bay, Antarctica*. Noble's photograph encourages viewers to decipher reality and fiction, and further, to bring such critical views into their

everyday encounters with media representations of Antarctica. Noble has undermined the very construction of 'Nature' which Morton has described. Similarly, Rockman has chosen to undermine the idealised perception of Antarctica that is so often sold in tourism marketing. Highlighting the negative, physical implications of cruise liner expeditions in Antarctic waters, Rockman also implicates himself in this cycle of Antarctic tourism. As these artists have shown, offering exposing and confronting imagery can be of immense value to the cause of engagement with global issues such as global warming and climate change. The works of the artists discussed here attempt to underscore the realities of place, and indeed, the very real implications of their visiting Antarctica. It is true that by participating in the cycle of tourism or travel to the Antarctic continent, these artists are implicating themselves in the very industry they claim to critique. Indeed, it is difficult to reconcile the privilege of the artists being able to travel to Antarctica – whether through institutional programmes or expensive cruise liners – with the aim of critiquing or commenting on tourism in the region. Yet, as Dudovskiy articulated, first-hand engagement with eco or dark tourism sites can spark an immense level of engagement and concern for such locations. The artists discussed here have had the privilege of access to the Antarctic region and have used their positions to encourage discussion amongst their audiences, urging for holistic and critical thinking about human impact on the most fragile environments in the world.

CHAPTER 4
"Who Goes There?": Antarctic Science Fiction

…all this art and all these exhibitions about science fiction couldn't simply be interpreted as a manifestation of a culture focused on the future, but as a generic frame for talking about the what ifs of the human condition.[1]

- Andrew Frost

Figure 4.1: Joyce Campbell, Ice Ghoul, Antarctica, 2006, 5"x7" Daguerreotype.

[1] Andrew Frost, 'Possible futures, Science fiction in contemporary art', pp18-25, *Artlink,* Vol. 36 No. 4, December 2016, p. 25.

Ice Ghoul, Antarctica by Joyce Campbell evokes a sense of anxiety and fear in its viewer. A skeletal, face-like shape appears from the otherwise blank ice sheet, making the viewer question what they are seeing. Here the sublime is rendered not so much in the awesome encounter with nature but in the terrible realisation of the effects of climate change in this region. The ghoulish, other-worldly face seems to scream out from the ice perhaps as an imminent warning of catastrophe. Campbell's uncanny image alludes to concerns about the uncertainty of the environment, drawing on tropes from the genres of science fiction and gothic horror.

As Andrew Frost has articulated, the genre of science fiction not only offers a space for speculative exploration of the future but also operates as a general framework for discussing the questions and uncertainties of the contemporary condition of humanity.[2] With the environmental, political and social 'mesh' of our world in an increasingly precarious state, the hope of a stable future is often highlighted in popular media. The science fiction genre in particular can offer an escapist channel to solutions for our own issues; a format to project our concerns into the future, perhaps with the hope of finding solutions. Gerry Canavan has described a paradox of the very fabric of science fiction: that is, an entirely plausible narrative based in scientific knowledge and yet, the unrestrained possibilities of fantasy and fiction reign supreme.[3] By its foundation being based in both science and in fiction, sci-fi offers the opportunity to explore contemporary issues in abstract and creative ways. Just as Campbell's *Ice Ghoul* may stimulate the viewer to consider the uncertainty of our environment in this era of global warming, other artists employ sci-fi to reframe contemporary concerns and encourage critical thought.

Antarctica's well-established foundations in scientific research, along with its relative isolation mean that the continent is a prime site for these science fiction themes. Scientific activity offers a foundation of reality, while the isolation and extremity of the environment offer key parameters which allow science fictional ideas to unfold. While literature and film have played key roles in the establishment of a specifically Antarctic sci-fi sub-genre, contemporary artists

[2] Ibid.

[3] Gerry Canavan, 'Defined by a Hollow: Essays on Utopia, Science Fiction and Political Epistemology, Darko Suvin, Oxford: Peter Lang, 2010', *Historical Materialism,* Vol. 21, Issue 1, 2013, p. 209.

have also employed features of the genre in order to grapple with contemporary challenges. From the dichotomy of reality and fiction, themes of temporality, the sublime and the uncanny contemporary artists have found ways to adopt recognisable, established science fiction features into their own practice.[4] This chapter focuses on the work of Campbell, Connie Samaras, Ronnie van Hout and Pierre Huyghe, examining their practices within a context of a science-fictionalised Antarctic. Campbell's *Ice Ghoul* exemplifies the ways that versions of the sublime are implemented as a tool of sci-fi media. Her photograph points not only to traditional notions of the sublime but also to a contemporary sublime of anthropogenic environmental devastation. Samaras uses her 'documentary' photographic practice in the series *V.A.L.I.S* (2005-2007) to encourage questions about altered states of perception of reality, in particular how speculation plays a large part in our understandings of our environment. Taking particular influence from twentieth-century themes of lunar colonisation and the space race, Samaras channels science fiction directly. Ronnie van Hout's uncanny simulacrum *The Thing* references the 1982 cult Antarctic science fiction film of the same name, and the 1938 text by John W. Campbell, *Who Goes There?* These key pieces of Antarctic sci-fi have paved the way for many future references; the use of the uncanny and the strange are oftentimes used within the sci-fi genre as a way to consider human anxieties about life and existence. Multimedia artist Pierre Huyghe also draws upon ideas of speculation, yet a more encompassing disruption of reality becomes the central point in his film work *A Journey That Wasn't,* 2005. Each of the artists look at Antarctica through the lens of science fiction as a strategy for engaging with the challenges and anxieties of contemporary human life.

Sophie Jerram has suggested that *Ice Ghoul* depicts "something savage, atavistic and genuinely terrifying."[5] It is a photograph which raises questions and does not intend to give answers. Campbell has activated a sense of terror or fear that Burke described, in the hopes of stimulating emotional response to broader environmental, political and social issues. Jerram

[4] For example, John W. Campbell Jr's 1938 novel *The Thing* which would inspire a raft of Antarctic media, namely the 1982 John Carpenter film of the same title. Further Kim Stanley Robinson's *Antarctica,* a 1997 novel which shifted the author's focus from his award winning extra-terrestrial sci-fi to an Antarctic located narrative. Each of these examples embrace the tropes of sci-fi, yet make use of the local, Earth-bound context of Antarctica. Isolation and extremism play large parts in these stories, while their placements on Earth bring such fears closer to home. Antarctic sci-fi also bleeds into the Antarctic Horror genre, where isolation, extremism and the unknown are employed to instil fear in the audience.

[5] Jerram, 'Claims on Beauty', p. 10.

explains that Campbell's Antarctic photographs offer an alternative to epic grandeur and argues that the idealised framing of the region makes it into something we know well and simultaneously not at all. We are often overly familiar with expansive icy landscapes and crisp blue skies – yet the darkness and uncertainty of the place is often omitted from popular imagery. In this sense Campbell's *Ice Ghoul* encourages viewers to question this popular imagery, and to see what "lies behind that idealised landscape."[6]

The terrifying nature of the work identified by Jerram connects with a sense of the sublime. This notion of greater power and the vulnerability of humans is key to many interpretations of science fiction, particularly in Antarctic contexts. Campbell's Ice Ghoul not only implies discussions of climate change and in turn threats to life as we know it, but a supernatural unknown which harks to eighteenth-century fears of natural disasters and phenomena. At this time Edmund Burke described the sublime as that which evokes as strong an emotion as possible in humans:

> Whatever is filled in any sort to excite the idea of pain, and danger, that is to say, whatever is in any sort terrible, or is conversant with terrible objects, or operates in a manner analogous to terror, is a source of the sublime; that is, it is productive of the strongest emotion which the mind is capable of feeling.[7]

Building on Burke's influential ideas, commentators such as Roger Luckhurst, Alan Gregory and Alix Ohlin have suggested ways in which the sublime might be understood in the contemporary world. Luckhurst has explained that "the sublime hints at the infinite, hovering on the edge of transcendent, and seeks paradoxically to represent the supersensible *in* the sensible."[8] Luckhurst further writes that the notion of the sublime has shifted from a grandeur of nature, to a context where the end of nature is contemplated. Luckhurst has elaborated that in this shift, the sublime of nature is captured and mediated by technology: "the focus of the sublime fundamentally shifts."[9] For Ohlin, the fear of the divine is no longer generalised, instead,

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[6] Ibid.
[7] Morton D. Paley, *The Apocalyptic Sublime,* New Haven: Yale University Press, 1986, p. 6.
[8] Roger Luckhurst, 'Contemporary Photography and the Technological Sublime, or, Can There Be a Science Fiction Photography', *Journal of the Fantastic in the Arts,* Vol. 19, No. 2, 2008, p. 184.
[9] Ibid.

humanity has created a network over technology, government, business, communications and more. This is not to say that such a network replaces a religious identity, but rather that this globalised system has come to impact daily life.[10] Ohlin's theory implies that rather than anxieties about divine intervention or supernatural affect, human uncertainties about technology, anthropogenic environmental disruption and social issues perhaps hold more impact on their audience in today's climate. In 2015, Gregory described the sublime as a cultural construct, one which explores the 'grip' on the modern imagination held by the extremely powerful, the fearful, the threatening, the grand, the appalling, and indeed by that which pushes the boundaries of both imagination and reason.[11] In the contemporary era, he contends, "writers and readers, painters and viewers, philosophers, aestheticians, and theologians have rendered and discovered the sublime in new ideas and new objects."[12] Indeed, Gregory too has identified the relatively recent growth of the science fiction genre as a space in which technology has been entertained as a version of the sublime.[13]

A contemporary sublime as explored by Luckhurst, Gregory and Ohlin shifts focus from divine intervention onto anthropological concerns, dovetailing neatly with the ways that science fiction aims to reflect contemporary anxieties and concerns. The relationship between the sublime and science fiction becomes central to the ways that many artists, such as Joyce Campbell, are engaging with key themes of the twenty-first century. It is most valuable to consider the sublime not only in Gregory's contemporary understanding, but also as a product of Burke's initial ideas on the subject. Works like *Ice Ghoul* encompass the inspiration of terror which Burke highlighted, yet, this photograph also draws directly on the contemporary context. Anthropological impacts on the environment – and the massive implications of science and technology – are central to Campbell's work. What becomes clear from the work of scholars such as Ohlin and Gregory is that technology and contemporary issues can take the place of divine intervention and natural disaster in sublime scenes. It is only fitting then, that the sci-fi genre can be used by artists such as Campbell to explore the contemporary sublime,

[10] Alix Ohlin, 'Andreas Gursky and the Contemporary Sublime', *Art Journal* Vol. 61, No.4, 2002, p. 23.
[11] Alan Gregory, *Science Fiction Theology: Beauty and the Transformation of the Sublime,* Texas: Baylor University Press, 2015, p. 2.
[12] Ibid.
[13] Ibid. p. 4.

and in turn, as Luckhurst summarised, not an expression of the fear of the divine, but rather a contemplation of the "end of nature".[14]

Photographer Connie Samaras regularly works from extreme environments, interrogating contemporary relationships and perceptions of our environments. From the arid heat of deserts in New Mexico to the unforgiving frozen landscapes of Antarctica, Samaras employs extremity to highlight this same contemporary sublime. Indeed, Samaras actively embraces the genre of science fiction as a means to interrogate notions of reality, time and space. In the summer of 2004-2005, the artist undertook an expedition to Antarctica with the 'United States' National Science Foundation, Office of Polar Programs, Artist and Writer Grant'. Samaras has explained that this trip allowed her to experience the fragile relationship between existing "life support architecture" and the inherent extremity of Antarctic settlement.[15] Following her visit to Antarctica, Samaras produced the *V.A.L.I.S. (vast active living intelligence system)* series. This series includes photographs, as well as two film works, embracing lens-based practice to identify and interrogate a sense of reality which is so often implied in the representation of Antarctica. Samaras targeted active and seemingly abandoned symbols of human habitation in Antarctica, exploring the ways that humans have inserted themselves into the environment, and the ways that the environment is reasserting itself as the dominant force. Images of iced-over structures and vast landscapes describe the stark contrasts of human activity in Antarctica, the isolation and establishment, the openness and claustrophobia, living and visiting.

[14] Luckhurst, 'Contemporary Photography and the Technological Sublime', p. 184.
[15] Connie Samaras, 'V.A.L.I.S. (vast active living intelligence system) (2005)', http://www.conniesamaras.com/VALIS_text.html, accessed 1/6/2018.

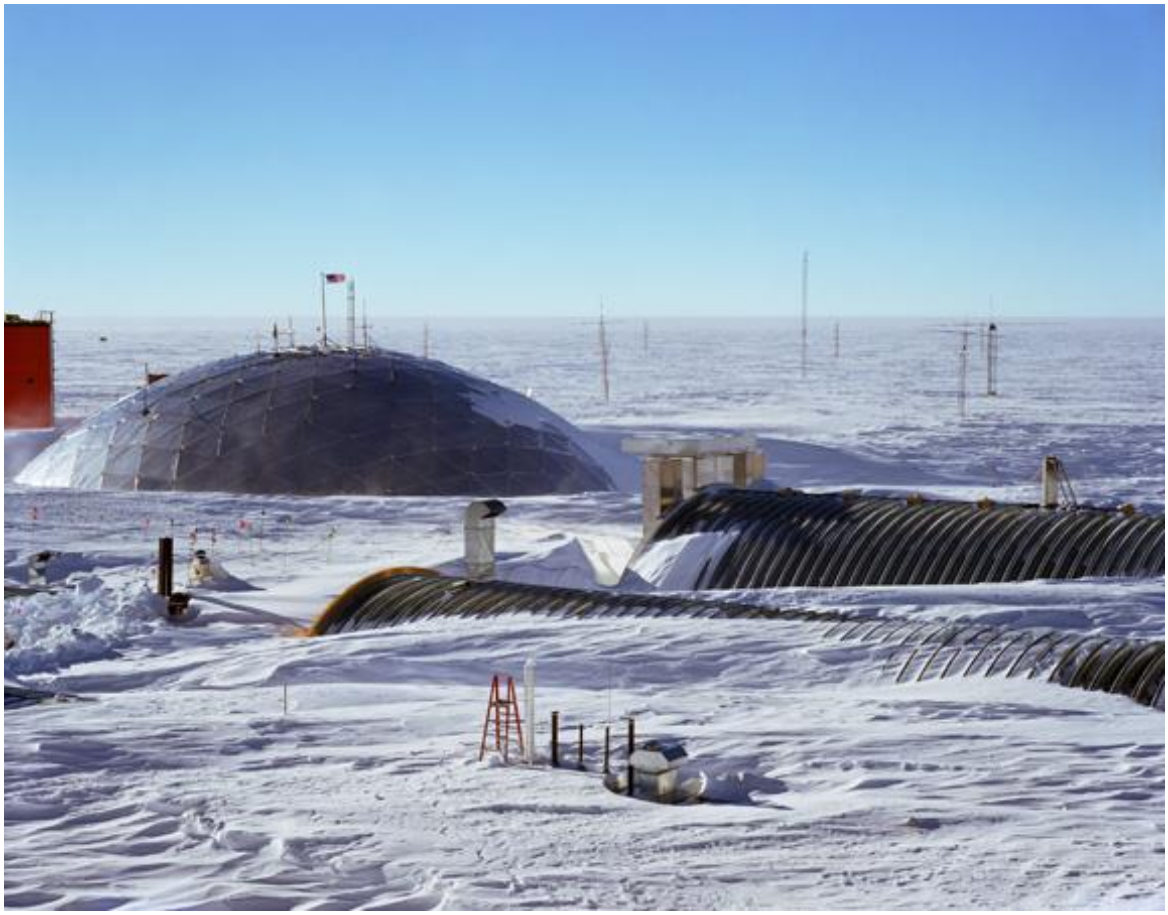

Figure 4.2: Connie Samaras, Dome and Tunnels, V.A.L.I.S (vast active living intelligence system), 2005-07, archival inkjet print from film, 60x48 inches

Although ostensibly working in a documentary style, Samaras' photographs reframe reality, highlighting its most unassuming yet strange elements. In this sense her work resonates with Luckhurst's notion of the "found fantastic":

> …the idea of the 'found' fantastic, in parallel to ideas of found texts in literature or ready-mades in art, the notion that bits and pieces of the world might already be in some ways fantastic and science fictional, or that it would only take a change of framing to render these objects or experiences broadly fantastic.[16]

The notion of the "found fantastic" encourages viewers to consider what they typically perceive as normal or out of the ordinary. Samaras reframes subjects such as buildings, ladders and ventilation pipes as something extraordinary or even extra-terrestrial. In doing so, Samaras

[16] Luckhurst, 'Contemporary Photography and the Technological Sublime', p. 181.

uproots signals of normality and hints at something unknown. Science fiction, particularly Antarctic sci-fi, at times embraces mundanity as a backdrop for the unexpected, a false sense of normality which allows space for futuristic, supernatural or superhuman narratives. *Dome and Tunnels* is a straightforward and simple composition of a collection of partially underground Antarctic structures, eerily empty and seemingly abandoned. Aerials and antennae protrude through the snow surface, while a large dome and tunnels dominant this mid-ground of the image. Samaras has framed this scene with no sign of any humans or other activity in the background, these structures are alone in the landscape: isolated in their environment and removed of their inhabitants. The isolation of the image, with its expansive, empty background, recalls imagery proliferated during the Twentieth Century of imagined Lunar colonisation. A blank canvas of an environment, with signs of civilisation, new technologies and a sense of hope — or indeed a simultaneous anxiety — for the future, Samaras' photographs of Amundsen Scott Station bear striking resemblances to the illustrations by Roy G. Scarfo, who depicted a Lunar accommodation in 1969 for *Science Journal.* The intrigue and mystery of space colonisation has been at the centre of public interest since nations began their race to the Moon during the Twentieth Century. In referencing this Samaras draws the parallel with our relationship to Antarctica, and the general perception of the Southern Continent as a distant planet, far removed from our own world.

Samaras' works reflect upon the ever-changing landscape of Antarctica and the human determination to remain present in the Antarctic region, despite almost all environmental factors being against us. For example, the researchers at Amundsen-Scott South Pole Station (where Samaras spent her time in Antarctica) find their base becomes "literally iced over every thirty years", and yet, remain steadfast in the idea that Antarctica must be inhabited, researched and understood.[17] Juli Carson has written on the irrational notion of Antarctic colonisation: the repetition and rebuilding of the Amundsen-Scott base after the ice reclaims its territory, each time in the hopes that a different outcome may be achieved. Carson questions how we visualise this type of Antarctic determination – or insanity – and how Samaras' work may aid in this understanding:

[17] Juli Carson, 'V.A.L.I.S Modernity's Buried Present', *Connie Samaras: Tales of Tomorrow*, USA: The Armory Centre for the Arts: 2013, p. 19.

> …flat-footed irrationalism vis-à-vis heroic romanticism – when the South Pole's vastness seduces, like a siren, even the most critical of us to lay down our guard?...Connie Samaras' research in Antarctica, navigates this line between the rational and the irrational, the banal and the heroic…[18]

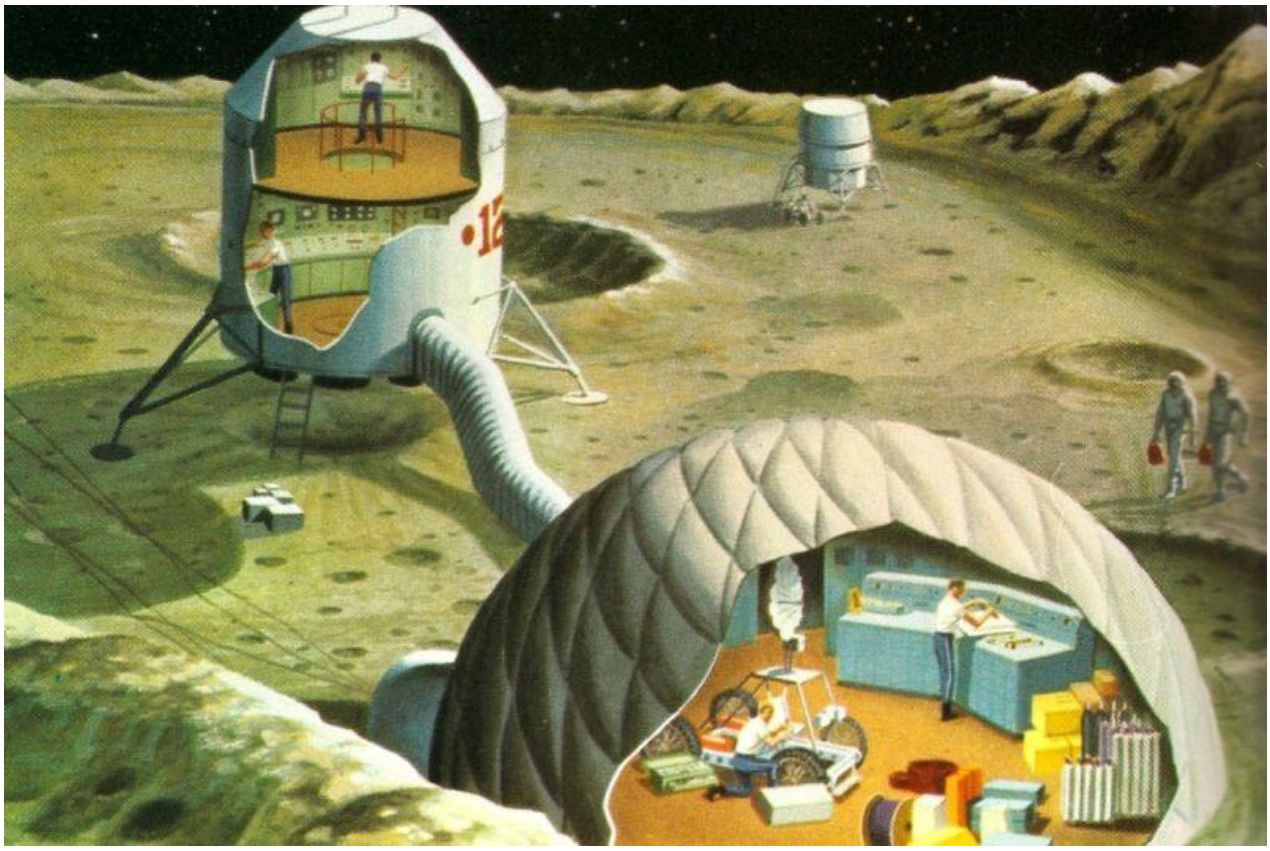

Figure 4.3: Illustration by Roy G. Scarfo for article by Dr. Rodney Wendell Johnson, Science Journal, May 1969

Samaras' works – in their commentary on the process of 'colonising' Antarctica - also explore the changing public imagination of the colonisation of extreme environments, from Antarctica to Mars. The determination to ensure human existence in extreme environments – usually due to a catastrophic event on Earth – is prime territory for sci-fi media. Samaras makes clear her strong link to science fiction themes, moving to imbue her works with the narrative of space colonisation and other-worldly intelligence. *Dome and Tunnels* (2005-2007) depicts some of the ice-encapsulated structures of Amundsen Scott Station. The rounded top of the dome and

[18] Ibid

snow-covered tunnels appear as though abandoned; rejected as sustainable forms of 'life-supporting architecture' and relegated to be consumed by the environment. To further emphasise her focus on the imagined space colonisation, Samaras' series title – *vast active living intelligence system* – is borrowed from the science fiction writer Philip K. Dick.[19] Andrew M. Butler has explained that "Philip K. Dick is the Poet Laureate of false memories and fake experiences."[20] In his 2001 biography of the author, Butler goes on to describe how Dick's accounts of the "illusions and delusions of everyday life" became a way for him to discuss issues like the American Dream and the Cold War.[21] He became known as a social commentator, using science fiction literature to examine reality. Samaras' *Dome and Tunnels* attempts similar feats, exploring our own realities through fictional and manufactured scenarios.

Science fiction literature also influenced Ronnie van Hout's exhibition *Who Goes There* (2009). Throughout the title of the exhibition, the title of individual work and the inherent subject matter, van Hout references John Carpenter's Antarctic sci-fi thriller *The Thing* (1982), and the preceding text *Who Goes There?* (1938) by John W. Campbell. *The Thing* and *Who Goes there?* both informed van Hout's work, encapsulating ideas of the uncanny, the doppelganger and personal identity. The film (inspired by Campbell's novel) depicts the story of a research team in Antarctica who become threatened and hunted by an alien creature which morphs into the form of its victims; a creature which is able to hunt, undetected and without warning, an unseen danger or in fact, more worryingly, a danger that comes from within. The characters of this story are cut off from the outside world, trapped alone this horrific series of events. The anxiety of being alone, isolated, uncertain, unsafe and unable to seek help are heightened within the Antarctic context. Andrew Frost has described the ways that the growth of the sci-fi genre has formed a kind of 'folk history', a shared understanding of science fiction themes and the ways that these themes impact their viewers. In particular, Frost elaborated that this 'folk history' is often referenced in contemporary art and other forms of media as a way to explore some of the anxieties of contemporary life.[22] In *Who Goes There*, van Hout highlights the importance of these shared cultural histories: van Hout employs the well-understood fears

[19] Samaras, 'V.A.L.I.S. (vast active living intelligence system) (2005)'.
[20] Andrew M. Butler, *Philip K. Dick,* Pocket Essentials, 2001, p. 7.
[21] Ibid. p. 8.
[22] Frost, 'Possible futures, Science fiction in contemporary art', p. 24.

of isolation and danger, embracing the impact of Antarctica as a prime location for this narrative.

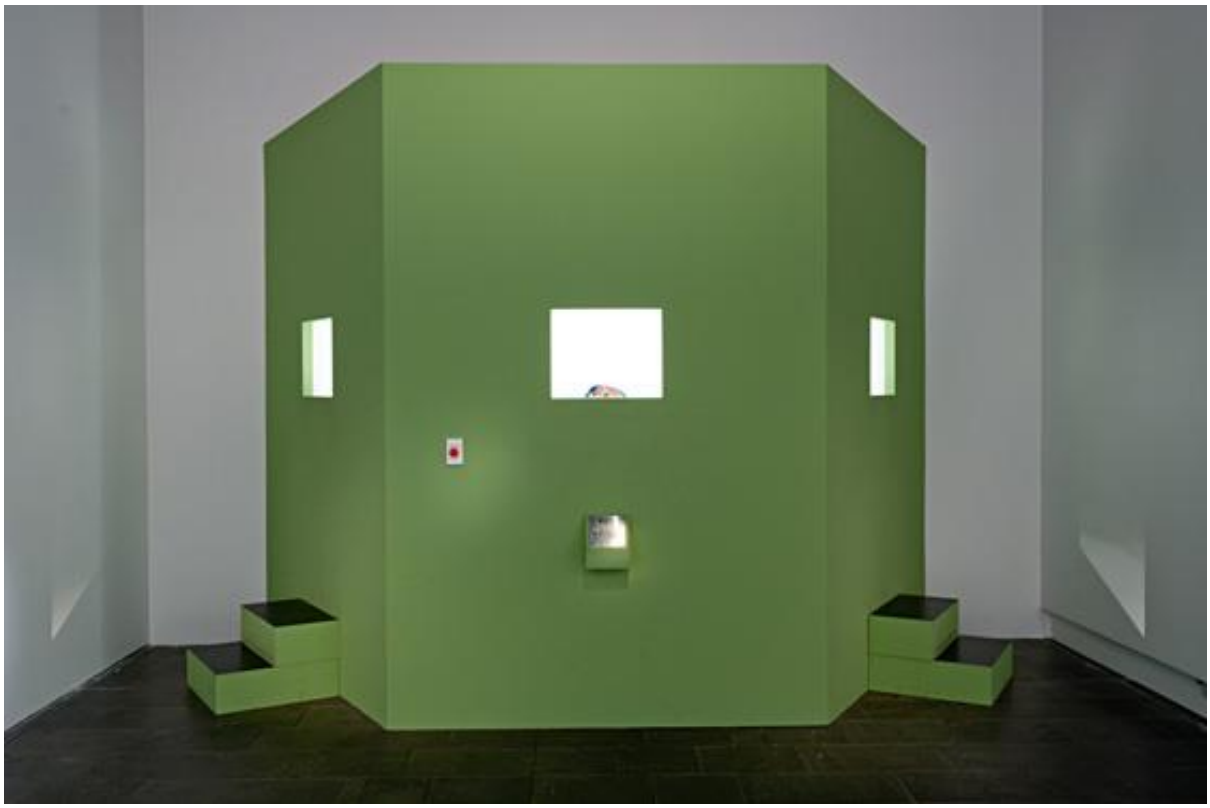

Figure 4.4: Ronnie van Hout, The Thing (installation view at Christchurch Art Gallery 2009), 2009.

Justin Paton suggests that van Hout has drawn a focus onto "the hyper-mundane life inside Scott Base".[23] Paton expands that the explicit sci-fi references insinuate that "something more may be going on amongst the everyday duties of the base." It is clear, from the implications of van Hout's interest in the work of both Carpenter and Campbell, that the mundanity Paton initially noted begins to unravel. It is this uncertainty which underpins van Hout's work. In particular, van Hout's spooky simulacra *The Thing* pushes the boundary of blandness of the everyday in such a way that it becomes disconcerting and troubling. Interested in the experience of isolation in the Antarctic environment – reflective of his own experience during an artist residency – van Hout created a doppelganger of himself, sitting passively within a green cell which seems purpose-built for observation from a position of safety. Small windows in the structure allow viewers to peer into the illuminated space and look at the figure within.

[23] Justin Paton, 'Ronnie van Hout: Who Goes There', Christchurch Art Gallery, date unknown, https://christchurchartgallery.org.nz/multimedia/curator-tours/ronnie-van-hout, accessed 10/11/2018.

In doing so, viewers are placed in a voyeuristic situation, outside of the narrative drama of the work but certainly implicated in the power dynamics and anxieties of looking. In an era of intentional and unintentional over-sharing through social media, personal data exchanges and hacking, technological uncertainties and interference of both private corporation and government; watching and being watched are major contemporary concerns. Humans are more visible and exposed than ever before, vulnerable to almost anyone who chooses to look in, and yet there is a sense of isolation which comes hand-in-hand. A decrease of person to person contact, increase in reliance on personal devices and technology designed to make life 'easier' has isolated many people from their communities. Van Hout directly identifies this fear of simultaneous isolation and exposure. Taking these anxieties literally, van Hout evokes exposure to the elements in one of the most remote places on Earth.

A tiny dribble of blood that leaks from the nose of van Hout's manikin hints that something is wrong, the title further gives away that that this figure is not what the viewer perceives it to be. Van Hout's embracing of these themes of voyeurism and uncertainty speaks directly to a popular culture understanding of science fiction media, while highlighting ongoing references to 'the uncanny'. Built from a range of concerns - the self and the other being particularly key – the notion of the uncanny is often employed in science fiction media as a way to consider human anxieties about life and existence. As a theme which explores ideas of the self, the uncanny is particularly at home within science fiction media: human synthesis, transplantation, genetic modification, robots, artificial intelligence, the replacing of humanity with the non-human. What populates the uncanny is the anxieties of humans, projected into forms external from ourselves.[24]

J. P. Telotte and Barry Keith Grant have discussed that the uncanny in sci-fi often indicates a purpose outside of our common perception of reality. A lack of understanding, or indeed, a lack of control plays a key role in establishing the uncanny. Telotte and Grant argue that the appearance of multiple personalities or a doppelganger-type figure is a typical feature of the uncanny. The presentation of an environment which confronts the viewer's interpretation of reality, and particularly a rupture which confronts the relationship between the self and the

[24] J. P. Telotte and Barry Keith Grant, *Science Fiction Film,* Cambridge, Cambridge University Press, 2001, p. 161.

other are the basis for exploring the uncanny. These features are certainly embodied in van Hout's *The Thing.* Telotte and Grant explain that often times, once a rupture in reality and relationships is established, it is the collapse of any kind of normal distinctions between subject and object which create an affective uncanny.[25]

> …the collapse of subject-object distinctions – that which occurs, for example, when the self becomes something – points up the most disturbing implications of those results, the consequent qualitative shift in our sense of the self or of others.[26]

These authors have outlined the key worry that forms in viewing van Hout's *The Thing*: this is to say that through his use of the uncanny, van Hout heightens our uncertainties about ourselves, and equally of others.

Figure 4.5: Ronnie van Hout, The Thing (detail), 2009.

[25] Ibid. p. 162.
[26] Ibid. p. 164.

Pramod K. Nayar explains that the uncanny as we most often experience it is the perception of any object or being approximating to be human. For instance, Nayar elaborates, the often-used similarities between humans and robots within the sci-fi genre highlights the identification – or inability to identify – of what is and is not human. Nayar has suggested that in a contemporary context, "the self is not an autonomous self anymore."[27] The anxieties played upon by artists such as van Hout are particularly effective as the sense of self and self-determination in a contemporary era is unlike anything we have experienced previously. Nayar quotes Christopher Johnson in support, who states that humans are now "animated and agitated by a power or program that seems to violate our most intuitive sense of self-determination."[28] Perhaps, as Nayar and Johnson offer, the anxiety that is felt when questioning the self is more focused on a lack of self; a lack of self-determination.

In the 1970s Masahiro Mori reflected on human reaction to robots who have human-like features. Mori suggested that human responses to a human-like android or robot would shift quickly from empathy (towards another human), to revulsion as the subject failed to attain – or retain – a realistic, life-like appearance. What has been described as the "descent into eeriness", describing this shift in emotion, has come to be known as the "uncanny valley."[29] The uneasiness which Mori described is encapsulated in van Hout's *The Thing.* Upon approach, the viewer realises that this is no human, that they do not know exactly what it is, nor do they understand it. Van Hout's motionless doppelganger confronts the viewer to consider if they are any different, or if they too are a subject of voyeurism within some form of confinement unit. Van Hout has employed key science fiction themes — specifically through a kind of 'folk-lore' retelling of sci-fi narratives — in order to draw attention to contemporary anxieties of humanity and existence. The artist's references to a long history of Antarctic representation in fiction media describes the ways that as societies, we have applied meaning and implications to this region. The cultural history of Antarctica is epitomised in van Hout's work: the Antarctic has become a place from which concerns of isolation, voyeurism, uncertainty and anxieties about our very being can be discussed.

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[27] Pramod K. Nayar, 'The Biotechnological Uncanny: Frank Miller's 'Ronin'', pp135-146, *Hungarian Journal of English and American Studies,* Vol. 19, No. 1, 2013, p. 139.
[28] Ibid.
[29] Masahiro Mori, Karl F. MacDorman, Norri Kageki, 'The Uncanny Valley [From the Field]', *IEEE Robotics and Automation Magazine*, Vol 19, Issue 2, 2012, Abstract.

Figure 4.6: Pierre Huyghe, A Journey That Wasn't, 2005, Super 16mm film and HD video transferred to HD video, colour, sound. 21 minutes 41 seconds

> I'm interested in translation and movement and corruption from one world to another. I have doubts about exoticism, this fascination for bringing an 'elsewhere' here, believing that 'there' is 'here'. Elsewhere remains a story: to bring it back, you have to create an equivalent. [30]

Interspersing footage from a 2005 Antarctic expedition and a concert in Central Park, New York, Pierre Huyghe's *A Journey That Wasn't* (2005) similarly ruptures the viewer's sense of reality, time and place. Breaking up the traditional linear progression of time and recreating an Antarctic experience in the middle of New York City, Huyghe is interested in the ways that film can create new realities instead of documenting existing ones. While Huyghe and his crew did in fact travel to Antarctica in February of 2005, the title of the work – *A Journey That Wasn't* – disturbs our belief in the artist's story from the outset. Huyghe embraces the unknown of

[30] Pierre Huyghe and Cheryl Kaplan, 'The Legend of Two Islands: A conversation between Pierre Huyghe and Cheryl Kaplan', date unknown, https://db-artmag.de/archiv/2005/e/7/1/385.html, accessed 14/01/2019.

Antarctica to highlight the creation of alternative timelines and realities. All of the sci-fi qualities that go hand in hand with the isolation and extremity of the region, highlighting the creation of alternative timelines and realities. Huyghe's film presents an alternative – or entirely fictional – version of events. He has no interest in bringing Antarctica to New York, instead, he wishes to create an equivalent experience which will act as a translation of his own expedition.

Figure 4.7: Pierre Huyghe, A Journey That Wasn't, 2005, Super 16mm film and HD video transferred to HD video, colour, sound. 21 minutes 41 seconds.

Having heard of areas of uncharted ocean, islands being revealed by the melting Antarctic Ice Shelf, and rumours of an elusive albino penguin, Huyghe mounted a mission to the South in order to explore an alternate reality. Arriving in the Antarctic, Huyghe and his crew settled on an island where they believed the mysterious penguin they sought may be found. A story has been proliferated surrounding this work, that after a few days of waiting in the ice, the penguin stumbled across the crew's filming location.[31] However, the crew director of photography

[31] Author Unknown, 'Pierre Huyghe, A Journey That Wasn't', *Tate,* date unknown, https://www.tate.org.uk/art/artworks/huyghe-a-journey-that-wasnt-t12464, accessed 14/01/2019.

Maryse Alberti recounts that the penguin had been seen elsewhere, and was in fact "wrangled" to be at the established filming base.[32] This conflict between what is presented in Huyghe's film and the reality of manufacturing the imagery highlights the way that documentary film in particular is so often trusted unequivocally. It becomes very clear to the viewer that Huyghe's interest is not in the presentation of a wildlife documentary, but rather, in questioning "reality" itself.

The film cuts between shots in Antarctica and New York, presenting mirrored scenes in both locations as contrasting realities, disrupting the viewer's understanding of the progression of time in this narrative. The viewer sees similarities in the establishment of an extreme Antarctic or Antarctic-like environment yet is directed back and forth from one reality of the narrative to the other. Jumping not only between different temporalities but between drastically different locations, Huyghe complicates the viewer's perception of reality. The work in its finished form is presented as a high definition film, displayed in a dark room within a gallery. A narrator explains some about the expedition at the outset of the film, giving brief context before leaving the viewer alone with the rest of the work. Huyghe himself has stated that "everyone trusts the narrator, but the narrator can be wrong."[33] In removing voice-over narration from a majority of the film, Huyghe leaves the viewer to consider the film alone – though, in his very act of this decision, Huyghe presents a narrative of the importance of interpretation and perception. The film cuts between footage of the crew in Antarctica waiting for the elusive albino penguin and an Antarctic-inspired set in an ice rink in Central Park. Orchestral backing is heard, composed by Joshua Cody and inspired by Huyghe's topographical map of the island where the penguin was supposedly found.

Human activity in the Antarctic shots is depicted as isolated within a vast landscape. Wide shots with small humans in the ice make their motivations and impacts seem miniscule. Cutting back to one of the most recognisable cities in the world – perhaps the epitome of human impact – Huyghe presents a dramatic contrast. The scenes in New York's Central Park, however, have a more other-worldly, more out of place, more dream-like sensibility. Through these contrasting

[32] Huyghe and Kaplan, "The Legend of Two Islands: A conversation between Pierre Huyghe and Cheryl Kaplan".
[33] Ibid.

images, the story of the search for the albino penguin unfolds. Finally, an animatronic white penguin takes the stage in New York; a simulacrum of reality. This robot is not a penguin, but rather a representation of a penguin – an uncanny version which further critiques ideas of reality and place.

Figure 4.8: Pierre Huyghe, A Journey That Wasn't, 2005, Super 16mm film and HD video transferred to HD video, colour, sound, 21 minutes 41 seconds.

Alongside the film, Hugyhe presents a document, handwritten within a standardised template. This form identifies itself as a submission to the UK Antarctic Place-Names Committee, suggesting that the island on which the albino penguin was 'found' be named as 'Idleness Island'. Huyghe justifies his submission, writing: "Idleness is the place of ideas, of something new appearing. In that case an albino penguin."[34] This document portrays the albino penguin as something which exists as opposed to something which has been manufactured. Further, in presenting this submission to his audience, Huyghe attempts to bring some kind of reality or formality to a story which is fantastical and uncertain. The Antarctic Place Names Committee exists, as a branch of the British Antarctic Survey, and yet, in the context of Huyghe's practice

[34] "Pierre Huyghe, A Journey That Wasn't", *Tate.*

the viewer questions the legitimacy of the submission itself. The notion of official paperwork to an organisation like the British Antarctic Survey attempts to legitimise a project which is constantly defying reality, practicality and sensibility. Huyghe's *A Journey That Wasn't* confronts the viewer's sense of reality at every turn, using the context of the isolation and extremity of Antarctica as prime territory to question the viewer's understanding of time, place and reality.

Elena Glasberg has stated that "science fiction is an organic genre for representing Antarctica", noting that this region "has developed in a feedback loop with exploration and scientific knowledge."[35] The lack of knowledge and understanding of this continent proves to be an ideal canvas for the fantastic, the fear-inducing and the fictional. Antarctica has become an embodiment of many themes of science fiction media. A place of extreme isolation, uncertainty and extremity, this region provides a broad range of artists with the context from which to examine and critique contemporary anxieties. As Andrew Frost explained, science fiction is not simply a by-product of popular culture focused on the future, but rather is a framework within which humans can discuss the 'what ifs' of the very nature of humanity.[36] The work of artists Joyce Campbell, Connie Samaras, Ronnie van Hout and Pierre Huyghe highlight the ways that contemporary artists are embracing this channel of communication. They employ key themes of science fiction media in order to explore a range of anxieties: the notion of the sublime, something powerful and unknown; questioning the difference, or indeed the lack of difference between 'fact' and 'fiction'; the uncanny as a threat to our humanity; and finally, the complete rupturing of understandings of reality as we understand it. Though theoretically based on the future, science fiction – and particularly its interpretations in Antarctic-based contemporary art – acts as a mode of thought about the realities and complexities of how humans exist today.

[35] Elena Glasberg, 'Who goes there? Science, fiction and belonging in Antarctica', pp639-657, *Journal of Historical Geography,* Vol. 34, 2008, p. 641.
[36] Frost, "Possible futures, Science fiction in contemporary art", p. 25.

Conclusion

> Fictional representations of place can have a powerful performative function, changing the way we view the places through which we move…fictional representations of place are unconstrained by the demands of the documentary veracity and scientific falsifiability, they can help to bring about real change in the world, fostering the emergence of new kinds of places.[1]

Elizabeth Leane has explained how the imagination of place – of Antarctica specifically – can have extremely active roles in understanding the world. While fictional representations and creative interpretations of place are not limited by ideas of 'documentary', Leane has explained that they still hold the ability to foster a change in perspective and connection. Antarctica has a history of fictional and factual representation which is as long as its known existence – even prior: since 1587, some version of the Antarctic continent has been represented on maps.[2] Long before Terra Australis Incognita was ever sighted, explorers, map makers and the world were conceptualising what it might be. Throughout the following centuries Antarctica was considered and reconsidered, particularly in the 1890s and early 1900s. As specific Antarctic voyages made landfall and carried out more complex expeditions to the region, the shaping of a public imagination of the place began to form. The vast changes in geo-politics in the region, along with technological changes in photography, scientific research and representation, have meant that the global image of Antarctica is more and more widely proliferated.

Leane's theory on the role of fictional or imaginative representation reflects the work that the artists discussed in this thesis have done. Each project does not aim to espouse facts or figures, nor do they attempt to present a fully formed solution to contemporary issues facing the Antarctic continent. Instead, these artists each embrace their individual and creative perspectives in order to contribute to a diverse imagination of place. In exploring relationships between Antarctica and science, tourism and science fiction media, the artists discussed here draw attention to the ways that Antarctica is often presented and communicated to the world, and also to alternative ways of seeing.

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[1] Leane, "Fictionalizing Antarctica", p. 22.
[2] Roberts, "Story: Antarctica and New Zealand".

Anna McKee, Xavier Cortada, Chris Drury and Gabby O'Connor have focused their Antarctic works on the converging moments between scientific and artistic endeavours in the region. Their projects range from installation to works on paper – from ice drilled from beneath the surface of the continent to albatrosses flying above. Each of these artists has offered an alternative way of viewing what is typically considered scientific data. In attempting to communicate this information to a diverse audience, these artists aim to provoke engagement with the issues that confront Antarctic and global environments: sea level rise, global warming and the impacts these have on humanity and the Earth. These artists have explored the shifting relationships between art and science in the Antarctic region, highlighting to their audiences that, despite a history of scientific dominance, the arts in Antarctica are becoming increasingly valuable in communication and mediation of representation. Further, these artists have explored their own positions in this relationship, as both reliant upon, and critical of, the industrial implications of scientific research.

Adele Jackson, Anne Noble and Alexis Rockman similarly have drawn on the ways that their art practices intersect with another industry: tourism. Particularly in recent years, the reputation of Antarctica as a tourist destination has grown. Once the prize of a heroic voyage for very few, it is now accessible (though still extremely limited) through a multitude of commercial ventures, research trips and even private journeys. Alongside critiquing this growing tradition of tourism, Jackson, Noble and Rockman also highlight their own role in this cycle. Artistic access to the continent is either through governmentally supported programmes, or as passengers on the very cruise ships that these artists critique.

Joyce Campbell, Connie Samaras, Ronnie van Hout and Pierre Huyghe have drawn on tropes and processes of science fiction media in Antarctica in order to contribute to ongoing conversations about the precarious state of the world and humanity. The genre of science fiction has often been explored as a vehicle by which to interrogate contemporary issues and the conditions of humanity. Following this precedent, Campbell, Samaras, van Hout and Huyghe employed the specific context of Antarctica in order to highlight associated concerns: environmental disruption and global warming, ideas of truth and fiction, isolation and extremity and the very rupturing of what a viewer may consider to be 'reality'. It is the

extremity of Antarctica that provides the foundations of uncertainty and anxiety essential to the production of science fiction media. These artists have embraced the discomfort of Antarctic sci-fi in order to highlight very real concerns in this twenty-first century. Just as the work of other artists discussed in this thesis have, these artists seek to use their practice as a way to stimulate conversation and engagement with the world.

Throughout this thesis the aims of the artists have been the primary focus; the goals of engagement, criticality and awareness have formed the core of this discussion. It is important to remember alongside this conversation that the quantifying of success and degree of impact is difficult, if not impossible. Further, these artists simply do not have the reach to impact everyone, not even everyone that sees the works. Artists may very well have the intentions to engage their audiences and provoke a 'meaningful' connection with their subjects, yet, to believe that this is the case all of the time would be naïve. Rather, the conclusion that this thesis reaches is that these kinds of artistic contributions to dialogues regarding Antarctica – and in turn the world, and humanity at large – are a much better option than no contribution at all. A diverse, varied and wide-ranging approach to communicating and engaging with contemporary issues offers a higher chance for viewers to find something that they connect with. As William L. Fox explained in 2018, artists are able to employ empathy, love of place, understanding of other beings and notions of time and existence that go beyond conventional thinking.[3] These perspectives can offer their viewers alternative viewpoints from which to engage with their environment.

The above artists have each imaged Antarctica in their own varied and individualised ways, contributing to an expansive, infinite dialogue of Antarctic representation. What brings these case studies together is their responses to representations and imaginings of Antarctica, and what this might imply about the world. Artistic projects such as those discussed here help to explore what can be learnt when the world is presented with the Antarctic continent as a scientific research base; a sublime and isolated Nature, untouched by anthropogenic action; a tourism destination or a thrilling, fictionalised scene.

[3] Fox, 'Artists Have Never Been More Important'.

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